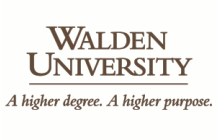

2019

Socioeconomic Impacts: Exploring Relationships between Parenting Styles and Emotional Intelligence in ODD

Radhia Afif
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Radhia Afif

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Nicole Hamilton, Committee Chairperson, Human Services Faculty
Dr. Scott Hershberger, Committee Member, Human Services Faculty
Dr. Gregory Hickman, University Reviewer, Human Services Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2019

Abstract

Socioeconomic Impacts: Exploring Relationships between Parenting Styles and Emotional Intelligence in ODD

by

Radhia Afif

MA, Saint Joseph's University, 2013

BS, Temple University, 2011

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human Services

Walden University

June 2019

Abstract

Children diagnosed with Oppositional Defiant Disorder (ODD) are at a higher risk to develop other serious problems based on reoccurring symptoms such as; aggression, hostility, and lack of empathy for others. Based on the emotional intelligence theory, it may be possible that understanding emotional intelligence in children with ODD could help reduce future psychological and social problems. This quantitative study addresses the problem of poor or low Emotional Intelligence (EI) in children diagnosed with ODD. A correlation between parenting style, as defined by Baumrind's parenting style theory, and the development of emotional intelligence has been found in current research. However, there is limited research which addresses the potential moderating effect of socioeconomic status (SES) on the relationship between parenting style and level of emotional intelligence in young children (4-8 years) diagnosed with ODD. Parents of children aged 4-8 years old, with a diagnosis of ODD, were sampled and asked to complete three surveys: Kuppuswamy's Socioeconomic Scale, Parenting Styles and Dimensions Questionnaire, and The Parenting Rating Sclae from Childrens Emotional Intellignce (4-8). There were 85 surevys completed. A multiple regression analysis with a moderator was used and the results did not show statistically significant impacts of SES on the relationship between parenting styles and level of emotional intelligence in young children diagnosed with ODD. Social change impacts may include: access to behavioral/mental health resources for families in low income neighborhoods and parent education/training.

Socioeconomic Impacts: Exploring Relationships between Parenting Styles and Emotional Intelligence in ODD

by

Radhia Afif

MA, Saint Joseph's University, 2013

BS, Temple University, 2011

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human Services

Walden University

June 2019

Dedication

I dedicate this dissertation to my mother, Ahmadah Afif, for being an example of someone who always works hard and does not take no for an answer. Through each step of my life she has been right there willing to help, give advice, and never judging me. She has been a constant example of a mother, sister, aunt, and friend. Her selflessness is admirable, and I love every characteristic of my mother that I carry on through my journey. Thank you for every sacrifice, every memory, and for my life. I also dedicate this dissertation to my friends and family. Thank you all for the support you have given me and will continue to give. I appreciate the advice, listening ears, and words of encouragement throughout this process. I love you all, I would like to share this accomplishment with my village.

Acknowledgments

I would like to give special thanks to my committee, Dr. Nicole Hamilton and Dr. Scott Hershberger, for supporting me through this process. The words of encouragement have been a motivator when the process was difficult. Also, I'd like to thank my fellow classmates Anita and Rarkim. Through this process you two have been willing to provide resources, answer my questions, and give me positive words of reassurance that have helped me continue to push through.

Table of Contents

List of Tables iv

List of Figures v

Chapter 1: Introduction to the Study 1

Background 1

Problem Statement 2

Purpose of Study 4

Research Question 5

Theoretical Foundation 6

Baumrinds Parenting Theory 6

Emotional Intellignce Theory 9

Nature of the Study 10

Definitions 13

Assumptions 14

Scope and Delimitations 14

Limitations 15

Significance 16

Summary 17

Chapter 2: Literature Review 19

Literature Search Strategy 19

Theoretical Foundation 20

Theory of Parenting Styles 20

Emotional Intellignce Theory 22
Oppositional Defiant Disorder 22
Emotional Development 25
Parenting Styles 28
SES and Parenting Styles 30
Emotional Intelligence and Parenitng Styles 34
Summary and Conclusions 35
Chapter 3: Research Method 37
Reseacrh Design and Rationale 37
Rationale for the Methodology 38
Methodology 39
Population 39
Sampling and Procedures 40
Sample Size 40
Procedure for Recruitment, Participation, and Data Collection 41
Data Analysis Plan 42
Instrumentation 44
Kuppuswamy's Socioeconomic Status Scale 44
Parenting Styles and Dimensions Questionnaire (PDSQ) 45
The Parenting Rating Sclae from Childrens Emotional Intellignce (4-8) 46
Threats to Validity 47
Ethical Procedures 47

Summary 48

Chapter 4: Results 49

Data Collection 50

Results 50

Assumptions 51

Data Coding 56

Statistical Analysis 57

Summary 61

Chapter 5: Discussion, Conclusions, and Recommendations 62

Interpretation of Findings 63

Theoretical Implications 65

Limitations of the Study 67

Recommendations 68

Implictaions 68

Conclusion 69

References 71

Appendix A: Kuppuswamy's Socioeconomic Status Scale 81

Appendix B: Parenting Style Dimensions Questionairre Short -Form 82

Appendix C:Parental Rating Scale from Childrens Emotional Intellignce (4-8) 83

List of Tables

Table 1. Summary of Regression Model 53

Table 2. Summary of Residual Statistics using Cook's Distance 53

Table 3. Summary of Collinearity Statistics 55

Table 4. ANOVA 59

Table 5. Model Summary 60

List of Figures

Figure 1. Scatterplot of expected and observed standardized residuals for the dependent variable emotional intelligence. 52

Figure 2. Scatterplot which displays the regression standardized residual and regression standardized predicted value. 54

Figure 3. Histogram which displays the curve of the data. Data within or close to the boundary of the bell curve signify normal distribution. 55

Chapter 1: Introduction to the Study

Oppositional Defiant Disorder (ODD) is one of the most common behavioral diagnoses among children, which is often a part of a comorbid diagnosis (Merikangas et al., 2010). Children diagnosed with ODD are at a higher risk to develop other serious problems based on reoccurring symptoms such as: aggression, hostility, and lack of empathy for others (Leadbeater & Ames, 2017). This quantitative study was conducted to examine the moderation effect of socioeconomic status (education, income, and occupation), on the relationship between parenting style (authoritative, authoritarian, and permissive) and the level of emotional intelligence (EI) in young children diagnosed with ODD.

In this study I build upon the work of previous researchers who have identified parenting styles and socioeconomic status (SES) as separate contributing factors related to child development. The social impact of the results related to the development of family interventions which support improvement in EI and the elimination or reduction of long-term effects of ODD. This chapter includes background knowledge, the problem statement, and the purpose of the study. Furthermore, this chapter outlines research questions, the theoretical framework and the nature of the study. Assumptions and limitations are also reviewed.

Background

The exploration of existing research revealed limited connections related to the development of EI in young children diagnosed with ODD and the variables of parenting style and SES (Alegre, 2012; Argyriou, Bakoyannis, & Tantaros, 2016; Batool & Bond, 2015; Cavanagh, 2017; Cindea, 2015). However, several researchers have noted that parenting style significantly impacts a child's development (Baumrind, 1991; Wood & Riggs, 2008) and have

identified parenting style as a substantial factor which contributes to physical, cognitive, emotional, and social development (Çalik-Var, Kiliç, & Kumandas, 2015).

As noted by Çalik-Var et al. (2015), parenting and SES are connected as these factors relate to child development. Controlling parents are categorized as middle and high-class families, based on SES, while parents who foster autonomy are categorized as lower-class. Historically, low-income families are characterized as having more discord and dysfunction (Çalik-Var et al., 2015; McLoyd, 1990). In comparison, wealthy families have structure and compliance. Mesman, van IJendoorn, and Bakermans-Kranenburg (2012) showed how important parenting style and SES are by examining significant child deficits. The authors noted that the deficits are caused by parental dysfunction and exacerbated by socioeconomic hardships such as: income, size of family, and lack of community resources. Comparatively, Reiss (2013) identified parental education and low household income as a factor in the development of mental health disorders. Other researchers have identified relationships between SES and mental health disorders (Boyle & Lipman, 2002; Davis, Sawyer, Lo, Priest, & Wake, 2010; Granero, Louwaars, & Ezpeleta, 2015; Kalff et al., 2001). However, there is limited research that addresses SES as a moderator on the relationship between parenting style and level of EI as it relates to ODD (Çalik-Var et al., 2015; Granero et al., 2015; Reiss, 2013;). An exhaustive review of literature has not shown the moderating effect of SES on the relationship between parenting style and the level of EI in young children diagnosed with ODD.

Problem Statement

When a child is diagnosed with ODD there is a clear identification of deficits in the management of mood and behavior (Leadbeater & Ames, 2017). Symptoms include: hostility,

defiance, spitefulness, and anger (Brown, Granero, & Ezpeleta, 2017). Young children diagnosed with ODD may often be referred for mental/behavioral health services due to temper tantrums, excessive arguing with adults, and lack of empathy for others (Leadbeater & Ames, 2017). Argyrious et al. (2016) identified these deficits in recognizing and assessing emotions of oneself, as well as others, as a lack of EI. EI is what permits differentiation between feelings felt by oneself and expressed by others. Children diagnosed with ODD who struggle to understand and adjust to their own personal feelings as well as others' feelings often have low levels of EI. EI is most often developed through operative social factors such as parenting style and socioeconomics (Salovey & Mayer, 1990). However, for children with ODD more research is needed to further understand the moderating effect of SES on the relationship between parenting style and level of EI based on the lack of current literature (Çalik-Var et al., 2015; Granero et al., 2015; Reiss, 2015).

This study addresses the problem of poor or low EI in children diagnosed with ODD. A correlation between parenting style and the development of EI has been found in current research (Batool & Bond, 2015; Boe et al., 2014; Cindea, 2015; Wood & Riggs, 2008). Wood and Riggs (2008) determined that the lack of strong or healthy parental bonds, developed through parenting, can create long-term impacts involving a child's inability to manage emotions, form healthy attachments, and make sound decisions. As previously noted, children diagnosed with ODD often have difficulty empathizing with others and understanding one's own feelings which are indicators of lower EI. Cindea (2015) found positive and negative correlations to adolescents' EI in comparison to perceived parenting styles of their mothers and fathers. Therefore, there is a correlation between parenting style and EI which could be linked to ODD.

Although parenting style may directly affect the development of EI in children diagnosed with ODD, socioeconomic status should be explored as well. Baumrind (1978) noted that low-income families were more prone to use harsher punishments in their parenting style in comparison to wealthy families. It is assumed that parents who are wealthy have less strict behavioral requirements in the home and may use less harsh punishments in comparison to low-income families (Boe et al., 2014). Varying levels of income, community support, and resources may influence parenting style and therefore the development of EI in young children diagnosed with ODD. However, researchers have not fully explored these factors together.

Recently, researchers have found connections between ODD and parenting style (Brown et al., 2017), parenting style and EI (Argyrious et al., 2016; Cindea, 2015), and socioeconomic status and parenting style (Boe et al., 2014). I conducted a thorough review of the literature and did not find any studies that addressed the moderating effect of SES on the relationship between parenting style and level of EI in young children diagnosed with ODD. Therefore, there is a gap in research. This identified gap warranted further research to examine the moderation effect of SES as it relates to the relationship between parenting style and level of EI in young children diagnosed with ODD as poor or low EI is a growing problem (Leadbeater & Ames, 2017).

Purpose of the study

The purpose of the study was to determine if socioeconomic status moderates the relationship between parenting style and the level of EI in young children diagnosed with ODD. Based on the EI theory (Salovey & Mayer, 1990) it may be possible that understanding EI in children with ODD could help reduce future psychological and social problems. Higher EI increases the likelihood that someone will be more effective in managing their emotions and

more adaptable to their environment (Cindea, 2015). Also, many developmental skills, which contribute to effective management of emotions, begin in the home. As implied in Baumrind's (1966) parenting style theory, parenting style can influence EI as it is a significant factor in child development. The style of parenting (authoritative, authoritarian, and permissive) used in the home and socioeconomic status (size of household, income, and education) can influence the way a child develops socially, psychologically, and cognitively. Poor development and growth in these areas can manifest as academic underachievement, hostility/aggression, poor social interactions, and delinquency (Cavanaugh, Quinn, Duncan, Graham, & Balbuena, 2017). Comparably, children with lower levels of EI are at risk to experience lack of empathy and regard for others, delinquency, and increased aggression (Cindea, 2015).

Current research shows some correlation between EI and parenting style or perceived parenting style (Argyrious et al., 2016; Cindea, 2015). However, there is little existing research which addresses the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. Examining the noted variables can be beneficial in classifying long and short term psychological and social effects which might influence EI in young children with ODD. Therefore, to address the limitations in the literature, I explored the moderating effect of SES on the relationship between parenting styles and level of EI in young children diagnosed with ODD.

Research Questions

Research Question 1: Is there a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD?

$H_0$1: There is no significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

H_a1: There is a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

Research Question 2: Does SES moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD?

$H_0$2: SES does not moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD.

H_a2: SES does moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD.

Theoretical Foundation

The theoretical basis for the study includes Baumrind's (1966) theory of parenting styles and Salovey and Mayer's (1990) model of trait emotional intelligence. Baumrind's (1966) theory has been extensively used in research and is well-known in the literature addressing the three parenting styles: authoritative, authoritarian, and permissive. Comparatively, Salovey and Mayer's (1990) model is popular and helps to identify facets of traits related to EI. Each theory provides a foundation for the research as ODD relates to both parenting style and EI. These theories are used to set a foundation for the exploration of the variables.

Baumrind's Theory of Parenting Style

Baumrind (1966) identified three distinct styles in the parenting style theory. These parenting styles are commonly recognized in medical and mental health fields. The three parenting styles include: authoritative, authoritarian, and permissive. Each style is defined based

on a set of standard behaviors displayed by parents on a two-factor continuum of high demandingness versus low demandingness and high responsiveness versus low responsiveness (Baumrind, 1978). Responsiveness is identified by Baumrind (1991) as "the extent to which parents intentionally foster individuality, self-regulation, and self-assertion by being attuned, supportive, and acquiescent to children's special needs and demands" (p.61). Demandingness (control) is referred to as "the claims parents make on children to become integrated into the family whole, by their maturity demands, supervision, disciplinary efforts and willingness to confront the child who disobeys" (Baumrind, 1991, p.62). Baumrind (1983) stated that the pairing of responsiveness and demandingness, low or high, provides an outlook to associated outcomes of each parenting style.

Most positive outcomes for children connect to authoritarian parenting styles (Milevsky, Schlechter, Netter, & Keehn, 2007). Some distinctive characteristics of this parenting style include: warm responsiveness to child's needs and wants, high expectations, clearly identified rules, reinforced independence, and support (Baumrind, 1978). Some associated outcomes as a result of the authoritative parenting style are: increased self-esteem, less delinquent behavior, improved social skills, and more exceptional academic performance. The authoritative parent manages and rationally directs the child's behavior, while also fostering independence and structure (O'Reilly & Peterson, 2014). This parent values autonomy while providing the child with the rationale behind rules and guidelines across settings. The authoritative parent applies firm control as the parent and authority but in a way that the child continues to feel empowered and able to make sound decisions and choices. This parent is assertive but finds a balance

between control and autonomy. Baumrind (1966) views this style as the most effective for yielding high demandingness and high responsiveness.

Authoritarian parenting is more restrictive as parents using this style tend to be unresponsive but have high expectations of the child (Baumrind, 1978). Also, a parent adopting this style may be very strict and rigid with rules, expecting unsighted obedience. Children who are parented using the authoritarian style are more likely to develop: low self-esteem, poor social skills, delinquency such as drug and alcohol abuse, and may form a mental health diagnosis (O'Reilly & Peterson, 2014). The authoritarian parent shows a high level of control while placing little value on autonomy. This parent acts in a strict and inflexible manner which communicates the idea that the child has no independence or freedom to disagree or be indifferent about home rules and other demands placed on the child (Milevsky et al., 2007). An authoritarian parent uses punishment as a form of control and expects obedience without question. Baumrind (1978) described this style as stern and or firm noting the high level of demandingness and low responsiveness to child's needs.

In examining the authoritarian parenting style, power, control, and rigidity are explored as contributory factors of childhood delinquency, wrongdoing, and thoughtless actions (Maccoby & Martin, 1983; Milevsky et al., 2007). The absence of appropriate parent-child bonding including: warmth, responsiveness, and nurturing can be detrimental to a child who seeks affection. This child may seek affection from strangers because of the lack of attention shown and poor attachment within the family structure. Wood and Riggs (2008) noted that empirical research has shown that insufficient nurturing and protection, as well as uncertain bonds, become vulnerabilities in development of children.

Authoritative and authoritarian parenting styles present as comparable opposites sharing a similar style of high expectations (Baumrind, 1978). However, authoritative parents contribute more to the development of a child through their nurturing and active engagements. The balance of responsiveness, support, and reinforced independence encourages the importance of setting and maintaining high expectations (Darling & Steinberg, 1993). In comparison, authoritarian parenting is very rigid and indifferent which does not contribute to the maintenance of high expectations causing associated outcomes such as low self-esteem (Baumrind, 1966).

Salovey's and Mayer's Theory on Emotional Intelligence

In 1990, Salovey and Mayer introduced EI as one form of intelligence and a subcategory of social intelligence. Salovey and Mayer identified EI as the ability to recognize, incorporate, and understand emotions to stimulate growth in oneself. The researchers argued that in order to enhance thought processes, social engagement, and adaptive behavior one must be able to use appropriately, perceive, manage, and understand emotions of self and others. Mayer and Salovey (1997) categorized EI in four ways: perception of emotion, emotional facilitation, understanding emotions, and management of emotions. First, perception of emotion is described as the ability to recognize emotions in others as well as yourself. Second, emotional facilitation is the ability to use emotions to identify and signal changes in the environment, assist in providing alternative perspectives to others to adjust moods, and to apply rational ideas and thoughts to complicated situations. Third, understanding emotions involves familiarity with differing emotions and emotional changes overtime. Lastly, management of emotions includes both personal and interpersonal handling of emotions. Rodin and Salovey (1989) found that higher EI is associated with better intimate and family relationships, greater academic

achievement, and increased self-esteem while lower or limited EI is associated with insecurity, depression, poor social relationships, and academic failures.

Nature of the study

The research design is a quantitative study assessing the relationship between independent variables on the dependent variable, with a moderating independent variable (Babbie, 2010). This study allowed me to identify the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. I used a correlational approach to determine how factors are related because there are other factors which may be causational and there may be difficulty in controlling for all contributing factors (Frankfort-Nachmias, Nachmias, & DeWaard, 2005). In the study, there was no manipulation of variables; therefore, the study was nonexperimental.

The identified population consisted of parents within the Philadelphia, Pennsylvania area who have young children diagnosed with ODD. I utilized an agency which offers Behavioral Health and Rehabilitation Services (BHRS) as well as outpatient services to children and families in the city of Philadelphia to gain a sample of parents who have young children, ages 4-8 years, diagnosed with ODD. A nonprobability sampling plan was used to gather participants. A convenience method was used to increase the participation and collect data from available persons. Although this technique has limitations, such as: overrepresentation, the benefits included: less time, fewer persons to handle the data and the overall process, and more convenient access to the sample (Frankfort-Nachmias et al., 2005). The participants were chosen from a group of participants whose child(ren) are recipients of mental/behavioral health services and have a diagnosis of ODD. The primary caregiver was chosen to complete the surveys.

Kajbafnezhad (2016) noted that children will not develop EI independently but rather from their parents. Therefore, using the primary caregiver was beneficial as this person has spent the most time with the child and has been a direct influencer and teacher through their parenting style. Inclusion criteria included: families who reside in Philadelphia, Pennsylvania, have at least one young child (aged 4-8 years) living in the home who has a diagnosis of ODD, and can speak/read English. The surveys were distributed at the agency location or in the community depending on comfortability and accessibility for participants.

Questionnaires were used as the least invasive method to gather data related to parenting styles and socioeconomic status of the primary caregiver and EI of the young child diagnosed with ODD. Sample size was calculated using statistical power. The survey tools utilized included; Kuppuswamy's socioeconomic status scale (Singh, Sharma, & Nagesh, 2017), The Parental Rating Scale from Children's Emotional Intelligence 4-8 (Kajbafnezhad, 2016), and The Parenting Styles and Dimensions Questionnaire (PSDQ) (Robinson, Mandleco, Olsen, & Hart, 1995).

Kuppuswamy's socioeconomic status scale is based on valid and reliable testing (Singh et al., 2017) and is measured as a categorical variable. It is widely used to gather SES data from persons in urban and peri-urban communities and measures education, occupation, and income of the primary provider of the family. The socioeconomic scale is comprised of three areas of questioning:

- Education of head: post-graduate (1), graduate degree (2), higher secondary certificate (3), high school certificate (4), middle school certificate (5), literate, less than middle school certificate (6), and illiterate (7)

- Occupation of head: professional (1), semiprofessional (2), arithmetic skills jobs (3), skilled worker (4), semiskilled worker (5), unskilled worker (6), Unemployed (7)
- Family income per year (total family income (1-12).

The results of the socioeconomic survey will provide the socioeconomic status of the family which are broken down into five categories: (a) upper, (b) upper middle, (c) lower middle, (d) upper lower, and (e) lower.

The Parenting Styles and Dimensions Questionnaire (PDSQ) (Robinson, Mandleco, Olsen, & Hart, 1995) is a validated instrument also. The PDSQ is categorical and consists of 32 questions. A Likert scale is used to examine three styles of parenting: authoritative, authoritarian, and permissive. The Likert scale ranges from 1-5, 1 being "never" and 5 being "always". This scale is a self-report questionnaire and will categorize the primary caregiver into one of the three styles of parenting: authoritative, authoritarian, or permissive.

The Parental Rating Scale from Children's Emotional Intelligence (4-8) is a validated instrument (Kajbafnezhad, 2016). This instrument is made up of 45 questions. The scale assesses levels of EI in children 4-8 years based on three underlying factors: expressing and perceiving emotion, emotional understanding and evaluating, and emotional management and regulation. Although there are three factors, there is an overall score, which is a continuous number for EI. The scale is provided to the parent who rates each item (45 questions) using a 3-point Likert scale (3-always, 2-sometimes, and 1-never). The sum of the scales items is continuous (interval/ratio) and is used to identify the level of EI displayed by each child.

A multiple regression analysis with a moderator was used to analyze the results to identify the moderating effect, if any, of SES (moderator variable) on the relationship between parenting style (independent variable) and the level of EI dependent variable). The intended purpose of the multiple regression was to identify the relationships between the variables based on statistical significance and review the moderation effect of any of SES on the relationship between level of EI in young children diagnosed with ODD.

Definitions

The following are definitions of the commonly used terms in this study. They are presented in alphabetical order:

Emotional intelligence: Emotional intelligence (EI) is the capacity of individuals to recognize their own and other people's emotions, to discriminate between different feelings and label them appropriately, and to use emotional information to guide thinking and behavior (Srivastava, 2013).

Oppositional defiant disorder: A behavioral disorder, usually diagnosed in childhood, that is characterized by uncooperative, defiant, negativistic, irritable, and annoying behaviors toward parents, peers, teachers, and other authority figures. (The Children's Hospital, 2018).

Parenting style: Parenting styles are patterns of parenting practices which identify the way parents respond and demand to their children (Baumrind, 1991).

Socioeconomic status: An individual's or group's position within a hierarchical social structure (American Psychological Association [APA], 2018). Socioeconomic status depends on a combination of variables, including occupation, education, income, wealth, and place of residence.

Young children: Children ages 4-8 years old (Kajbafnezhad, 2016).

Assumptions

It is assumed that the data, which were collected by the researcher and reported directly by the parent, was truthfully reported, and the data was accurately collected. The results were anonymous and confidential to help ensure that the clients answered truthfully. The assumption exists that the tools which were used to collect the data were valid and reliable. It is also assumed that the specified tools measured the information for which they have been created to evaluate. Additionally, it is assumed that the sample was an accurate representation of the population and the results are generalizable.

A multiple regression analysis is typically used to understand the relationship between multiple independent variables and one dependent variable (Cohen et al., 2003). Assumptions of this statistical test include linearity (between dependent and independent variables), normality, homoscedasticity, no multicollinearity, no significant outliers, and no independent errors. Additionally, it is assumed that the dependent variable is continuous, and the independent variables are continuous or categorical.

Scope and Delimitations

The scope of the study focused on the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. This research topic was selected due to the lack of research on the specific topic as well as limited research for young children diagnosed with ODD (Alegre, 2012; Argyriou et al., 2016; Batool & Bond, 2015; Cavanagh, 2017; Cindea, 2015). Although parenting style has been mentioned among SES

research and vice versus these variables have not been thoroughly discussed when addressing EI in young children with ODD.

This study allowed the researcher to gain information from families of young children diagnosed with ODD. The researcher utilized participant information from a mental health/behavioral health agency to collect the data due to the convenient accessibility of families of children diagnosed with ODD. The target population to complete the assessments were primary caregiver/parent of young children diagnosed with ODD. The children were not chosen to complete assessments due to the sensitive nature of the research and the age of the children. Young children were chosen based on limited research for ages 4-8 years. This study is distinctive due to the exploration of SES as a moderator on the relationship between parenting styles and the level of EI in children diagnosed with ODD. It may be possible that understanding EI in young children with ODD could help reduce future psychological and social problems.

Limitations

Limitations in a study may contribute negatively to the generalizability and accuracy of the gathered data. Noted limitations in the current study included using The Parental Rating Scale from Children's Emotional Intelligence (4-8) as it has been used only once based on a review of literature (Kajbafnezhad, 2016). Additionally, there were preassessed limitations in sampling based on too small sample size of respondents. However, the sample size needed was 84 and 85 surveys were completely fully and returned to the researcher.

Convenience sampling was preassessed as a limitation because of sampling bias. Using this method of collecting data from the most accessible persons can produce overrepresentation in the population. However, to address this limitation participants were selected based on

outlined criteria. Additional limitations in correlational research designs are highlighted by the relationship between factors which determine an association but do not signify that a factor is solely the cause of an outcome (Babbie, 2010). When assessing correlational data, it is unclear if other untested variables cause a significant or specific relationship. Biases which may have influenced study outcomes include the occupation of the researcher. The researcher works with children diagnosed with ODD. There is pre-exposure to the diagnosis and background.

Measures that were taken to address limitations included assessing the appropriate sample size and making necessary changes to the analysis. I discussed the outcomes noting that the results do or do not have significant relationships but may not be the only factors which will determine the outcome. Data collection biases were limited as the surveys were anonymous, the researcher allowed participants to choose where to complete the surveys and provided options on returning surveys (in person or in a lock box). Additionally, informed consent was provided noting that participation was voluntary, participants had the option to opt out of the study at any time, and their participation did not/will not positively or negatively impact their services provided by the agency.

Significance

ODD is one of the most noted behavioral diagnoses among children, which is often a part of a comorbid diagnosis (Merikangas et al., 2010). Children diagnosed with ODD are at a higher risk to develop other serious problems based on reoccurring symptoms such as: aggression, hostility, and lack of empathy for others (Leadbeater & Ames, 2017). In a recent study completed by Cavanagh et al. (2017), researchers found extended symptoms of ODD lasting into adulthood. These symptoms affect interpersonal relationships, mood stability, and occupational

advancement (Leadbeater & Ames, 2017). Cavanagh et al. (2017) explored ODD relative to dysregulation of emotions making connections to both mood and anxiety disorders. Lack of emotional management and the ability to understand others' emotions can be identified through the emotional intelligence theory (Salovey & Mayer, 1990). As noted by Argyriou et al. (2016), parenting style is a predictor of EI in adolescence. Additionally, Argyriou et al. discussed the significance of parenting on the early development of EI and the benefits of emotional regulation in adolescents.

Recently, researchers have explored the connection between EI and parenting style in adolescence (Argyriou et al., 2016; Cavanagh et al., 2017; Leadbeater & Ames, 2017). However, there is minimal research which addresses the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. In a review of literature, it has been noted that lack of financial resources and community support can correlate to more harsh punishments and stricter consequences in low income households (Çalik-Var et al., 2015). Identifying the relationship between parenting styles on the level of EI in young children with ODD, with SES as a moderator was explored through the research study.

Summary

This study focused on the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. Children diagnosed with ODD show a range of symptoms which limit their abilities to manage their own feelings and assess feelings of others (Leadbeater & Ames, 2017). This deficit causes issues within the home, school, and community related to social interactions and academic achievement due to limited EI. Assessing the role of SES, as a moderator, on the relationship between parenting style and

level of EI can support and/or build upon current research to address community impacts. Additionally, the development of interventions to alleviate negative community impacts can also be assessed to address the current issues. Chapter 2 includes a review of literature on theories of parenting styles, EI, and SES.

Chapter 2: Literature Review

This chapter will be used to review the available research on parenting styles, SES, EI, and ODD in young children. This study addresses the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. Results of the study have the potential to provide insight into the relationship between parenting style and the level of EI in young children diagnosed with ODD, with SES as a moderator.

Recently, researchers have found connections between ODD and parenting style (Brown et al., 2017), EI and parenting style (Argyrious et al., 2016; Cindea, 2015), and socioeconomic status and parenting style (Boe et al., 2014). However, there is little existing research which addresses the moderating effect of SES on the relationship between parenting style and level of EI in young children diagnosed with ODD (Argyriou et al., 2016; Batool & Bond, 2015; Cavanagh et al., 2017; Cindea, 2015). Therefore, there is a gap in the research which explores the moderating effect of SES on the relationship between parenting styles and the level of EI in young children with ODD. The chapter is divided into sections which include: theoretical foundations, EI, parenting styles and emotional development, SES, and ODD. This chapter is used to review the current literature which supports the exploration of the stated variables and provide a foundation for purpose of the research questions.

Literature Search Strategy

The literature was largely gathered through Walden University's library, using the databases: PsycINFO, PsycARTICLES, PubMed, and EBSCO. In addition, websites such as Google Scholar were also used to gather important information. Some of the keywords searched or used for this study include: parenting style, Baumrind, emotional intelligence, socioeconomic

status, oppositional defiant disorder, young children, and child. Combined search keywords include: parenting style and socioeconomic status, oppositional defiant disorder and socioeconomic status, emotional intelligence and socioeconomic status, young children and emotional intelligence, and young children and oppositional defiant disorder. There were limited research findings related to young children 4-8 years and some of the major variables (parenting style, SES, EI and ODD). However, some emerging research included studies with information for the targeted age group (Antunez, de la Osa, Granero, & Ezpeleta, 2016; Bunte, Shoemaker, Hessen, van der Heijden, & Matthys, 2014; Ezpeleta & Penelo, 2015; Smith, Lee, Martel, & Axelrad, 2017).

Theoretical Foundation

Two notable theoretical frameworks were used for this study: Baumrind's' (1966) theory of parenting styles and Salovey and Mayer's (1990) model of emotional intelligence. Baumrind's' theory has been used for more than 50 years to address a variation of parenting styles and the impact on child development. In addition, Salovey and Mayer's (1990) model of trait emotional intelligence has been used for about 30 years to characterize EI and address one's abilities to recognize, incorporate, and understand emotions. These theories were chosen as the best foundation to build research based on the intended study of the moderating effect of SES on the relationship between parenting styles and the level of emotional intelligence in young children diagnosed with ODD.

Theory of Parenting Styles

Parenting styles are most closely related to a child's development, shaping, and determining behavioral outcomes (Baumrind, 1966). Attachments start in infancy and are

continuously developed throughout childhood. Poor or lack of attachment and parent responsiveness in childhood can be detrimental to children as they transition into adolescence and later adulthood (Çalik-Var et al., 2015). Baumrind's Theory (1966) of parenting styles was introduced in 1966. This theory identified styles of parenting which most resembled patterns of parental behavior based on child behavior. Baumrind found three types of parenting style through her research: authoritative, authoritarian, and permissive. Authoritative is characterized as warm and responsive parenting which yields self-confidence and academic success. Authoritarian parenting style is categorized as strict and rigid with high expectations. This style often yields low self-esteem and poor social skills. Permissive parenting is identified as flexible with very little boundaries and often yields children who have poor academic success and engage in delinquent behavior. This is not an exhaustive list of potential outcomes but contains some highlighted child behaviors related to differing parenting styles.

Baumrind is referenced in several studies, the validity and reliability of the research is noted (Cruz-Alaniz, Martin, & Ballabriga, 2018; Martin, Sturge-Apple, Davies, & Romero, 2017; Sheraz & Najam, 2015). This theory provides a foundation to specifically characterize parenting styles in the intended research. The longevity of the research and recurring references supports the theory and its use to identify parenting styles which correlate with child behavior and development (Cruz-Alaniz et al., 2018; Martin et al., 2017; Sheraz & Najam, 2015). Baumrind's (1966) theory of parenting styles was chosen for this study based on the continued use, existing research, and the staple it has in child development studies.

Emotional Intelligence Theory

Salovey and Mayers' (1990) model of EI has been used for a little under 30 years in research. The theory addresses the characteristics of EI and addresses four functions of EI including: perception of emotion, emotional facilitation, understanding emotions, and management of emotions. Salovey and Mayer (1997) found that EI has positive effects on individuals in childhood and adulthood. Some of the noted outcomes include: age appropriate social engagement, higher self-esteem, and emotional regulation. Notable effects from a lack of EI include delinquency, poor social relationships, and aggression. Overall, it was noted that higher EI correlates with better outcomes in relation to academic success, intimate and peer relationships, and self-perception. Salovey and Mayer's theory of trait EI was selected for this study based on the recurrence within the existing research. The theory addresses the development of managing and understanding emotions, which is lacking in children diagnosed with ODD who often exhibit aggression, defiance, hostility, and anger.

Oppositional Defiant Disorder

ODD can be diagnosed as young as three years and is often characterized by symptoms of defiance, hostility, and anger (Smith et al., 2017). The disorder has been identified as a prevalent disorder during childhood ranging between 6.9% and 13.4% in preschool children (Ezpeleta & Penelo, 2015). Antunez et al. suggested that levels of negative affect and low effortful control influence the development of oppositional defiant disorder in preschoolers. Ezpeleta and Penelo conducted a study with 622 preschool students and determined three ODD dimensions: negative affect, oppositional behavior, and antagonistic behavior. The researchers specified that negative affect is characterized by spiteful and/or angry behavior, oppositional

behavior is characterized by defiance and irritability, and antagonistic behavior is characterized by blaming and annoyance of others. Additionally, children who develop ODD are at a higher risk of developing comorbid diagnoses such as: conduct disorder, depression, and mood disorders (Leadbeater & Ames, 2017).

Short term effects of ODD include, but are not limited to: increased aggression, limited social functioning with peers, and noncompliance with authority figures (Cavanagh et al., 2017). Smith et al. (2016) utilized a network analysis to better understand and identify the dimensions of ODD in preschool children aged three years through six years. The authors found that negative affect and anger were the main factors related to the ODD network in the children studied and identified the importance of targeting these factors (through interventions) early in preschool. Using the network analysis, Smith et al. (2017) found that the DSM -5 three cluster model was most closely related with the sample of preschool children. The three-cluster model includes: irritability/anger (loses temper, touchy, angry), argumentative/defiant (four symptoms: argues, defies, annoys others, blames others), and spiteful (APA, 2013). Similarly, O'Kearney, Salmon, Liwag, Fortune, and Dawel (2017) showed that children diagnosed with ODD show deficits in identifying emotional causes with the strongest deficit was related to anger. However, the same researchers showed limitations in finding clear deficits in areas such as emotional labeling, perspective taking, and causes of emotion. The oppositional defiant behavior construct has shown that children exhibiting ODD symptoms are inclined to display context specific behavior in the home setting. Notably, this behavior may also be generalized in settings such as the school and community (Sheraz & Najam, 2015).

Shukla and Agarwal (2018) noted the risk and protective factors related to ODD. These factors are biological, social, and psychological which inhibit age-appropriate development of specific skills. The authors further explored these deficits by utilizing research to study impacts of parental psychopathology and family instability. Comparatively, referenced literature points to contributors such as parent-child relationships and maladaptive parenting as risk factors (Brown et al., 2017). However, Shukla and Agarwal (2018) also argued that genetic factors may be related to the onset of ODD in children as well.

Bunte et al. (2014) studied the stability and change of ODD, conduct disorder (CD), and attention-deficit hyperactivity disorder (ADHD) as related to functionality and symptomology. For the purpose of this research only information related to ODD was reviewed. Bunte et al. conducted a longitudinal study of children ages 3.5-5.5 years and identified five groups of stability: chronic, partial remission, full remission, new onset, and no diagnosis. Children with behavioral problems and typically developing children were assessed. It was found that 62% of children diagnosed at the start of the study continued to have ODD symptoms at the 18-month review. Bunte et al. noted limitations in relation to the findings of earlier research. The limitations were noted by researchers in that, only children and families with lower SES living in urban environments were previously studied.

Although ODD is diagnosed in children and teens there has also been emerging research on long term effects extending into adulthood (Leadbeater & Ames, 2017). Some long -term effects include the inability to have a stable job, poor anger management, and limited relationships with friends and family. In a recent study completed by Cavanagh et al. (2017), researchers found extended symptoms of ODD lasting into adulthood. These symptoms affect

interpersonal relationships, mood stability, and occupational advancement. Cavanagh et al. explored ODD relative to dysregulation of emotions making connections to both mood and anxiety disorders. Children diagnosed with ODD are at a higher risk to develop other serious problems (Leadbeater & Ames, 2017).

Emotional Development

ODD is characterized by a series of symptoms related to a child's ability or inability to recognize their feelings and the feelings of others (Leadbeater & Ames, 2017). These skills are often identified in research as EI (Çalik-Var et al., 2015; Granero et al., 2015). High or low EI could potentially help to identify deficits and behavioral outcomes in both children and adults (Çalik-Var et al., 2015; Granero et al., 2015). EI helps to identify how people use emotional information to both process and solve problems (Boily, Kingston, & Montgomery, 2017). The noted deficits contribute to poor social, psychological, and academic development in childhood. Emotional Intelligence is measured by both traits and abilities of an individual to determine their capability to recognize, process, and manage emotions (Salovey & Mayer, 1990).

Cavanagh et al. (2017) explored ODD as a disorder of emotional regulation. A sample of 4,380 children were used to assess ODD diagnostic items and relationships between ODD and Conduct Disorder (CD) as well as emotion dysregulation. Cavanagh found that ODD more closely relates to emotional regulation as compared to a disruptive behavior disorder. It was also noted that ODD is not independent and shares symptomology related to emotional dysregulation. However, symptomology is not limited to emotional regulation and includes factors such as emotion perception and knowledge of emotions.

The relationships between EI and ODD has been identified in some of the literature, as well as some of the short and long -term outcomes, symptomology, and development of both EI and ODD in children and adolescents. However, there is limited research related to children between the ages of 4 years and 8 years. This gap in literature may be due to the lack of interest in young children based on their early stages of life and the supporting research which discusses developing EI as children get older. However, there is some research which explores preschool children and their emotional development noting a need for early intervention (Dunsmore, Booker, & Ollendick, 2013; Locke & Lang, 2016; O'Kearney et al., 2016).

In a study completed by O'Kearney et al., (2016), 74 children, with and without ODD, aged 4-8 years old were studied to assess emotion perception, emotion perspective-taking, knowledge of emotions, causes and understanding ambivalent emotions and on parent-reported cognitive and affective empathy. It was found that children with ODD were less fluent than typically developing children in generating causes for anger but showed no relative deficiencies in emotion perception, emotion perspective-taking or in the ability to appreciate mixed emotions. Yet, Locke and Lang (2016) reported findings stating that children who showed context-inappropriate anger were more likely to have lower emotion recognition which, therefore, relates to development of anger as a response to aversive stimuli and other triggers. Context-inappropriate anger is defined as maladaptive emotion and anger dysregulation causing atypical responses to stimuli which do not normally incite anger. Dunsmore et al. (2013) added that unpredictable emotionality at the age of 3 years is an indication that a child will develop comorbid ODD and other mental health issues before 8 years.

Current research shows deficits in emotional development in both preschool years as well as in adolescence for children diagnosed with ODD (Bunte et al., 2017; Cavanagh et al., 2017; Leadbeater & Ames, 2017; Shukla & Agarwal, 2018; Smith et al., 2016). Although O'Kearney et al. (2017) highlighted the development of emotion perspectives and causes of emotions in the preschool years, Ezpeleta and Penelo (2015) noted that by age 8 many children will have begun to experience the social meaning of emotions. Additionally, Esnaola, Revuelta, Ros, and Sarasa (2017) identified a direct relationship between age and EI levels highlighting growth and maturity as contributors to this increase. Therefore, there is conflicting research related to the age of development of EI. However, it is known that higher emotional intelligence increases the likelihood that children will be more equipped to manage emotions and adapt to changing environments (Cindea, 2015).

Existing research extensively discusses EI in adolescents and the impacts on academic success, social behavior, and behavioral outcomes (Argyrious et al., 2016; Boily et al., 2017; Ezpeleta & Penelo, 2015; Garcia, Salguero, & Fernandez-Berrocal, 2014). Garica et al. (2014) conducted research to address the prevalence of aggression as related to EI. The researchers found that adolescents who displayed disruptive behaviors in school showed lower EI. This information aligns with Boily et al. (2017) findings that highlight the lack of understanding in receiving and processing emotional data to solve problems in persons with lower EI. Additionally, Argyrious et al. (2014) found that trait EI and authoritative parenting were positively associated and EI and authoritarian parenting were negatively associated. However, there is limited research on EI for young children diagnosed with ODD.

Parenting Styles

As emphasized in Baumrind's (1966) research, impulsive behavior, low-self-esteem, poor social skills, and delinquency are associated outcomes of parenting styles with a shifting balance of demandingness and responsiveness (ex. low demandingness and high responsiveness or high demandingness and low responsiveness). When children face challenges, responsive and sensitive parenting contributes to the improvement in emotion regulation and psychological adjustment. Thus, serving as a resiliency factor related to potential stressors. On the contrary, poorer adjustment to stress and challenges can be attributed to harsher and controlling parenting styles (Martin et al., 2017). In a study completed by Moreno-Manso et al. (2016) it was found that life experiences of children positively and negatively influence their ability to respond to aversive stimuli and to be competent socially and emotionally. It was revealed that many factors contribute to maladaptive outcomes including the severity of the event, the child's age, and how the child interprets the meaning of the event.

Current research explores the relationship between parenting and ODD to address the parental impact related to symptoms of the diagnosis (Cruz-Alaniz et al. 2018; Sheraz & Najam, 2015). According to Sheraz and Najam (2015) non-compliant and defiant behaviors are significantly associated with parent child relationships (positive or negative). In a study conducted to examine the affective and behavioral symptoms of ODD and multi-level family factors, results indicated that family factors such as the parent-child relationship and child emotional regulation were significantly related to ODD symptomology (Tang, Lin, Chi, Zhou, & Hou, 2017). The authors recommend that future research addresses multi-level (whole, dyadic,

and individual) family factors when creating or informing the development of interventions for ODD.

Booker, Ollendick, Dunsmoore, and Greene (2016) studied perceived parent-child relations and improvement after treatment of ODD. The researchers found that the severities of ODD symptoms were exacerbated by a child's perceived parental relationship. However, the number of symptoms were not affected. Research shows that emotional development may be influenced by the negative and positive emotions. These emotions are most often displayed within a family as children learn to understand and identify emotional elicitors through parent-child interactions (Locke & Lang, 2016). Family environment is noted as the foundation to support development of emotional norms related to managing emotions (Batool & Bond, 2015; Boe et al., 2014; Cindea, 2015; Moghaddam, Validad, Rakhshani, & Assareh, 2017).

Familial influences associated with positive verbal communication, improved confidence, and peace of mind significantly contribute to the lack of mental health disorders and the development of age appropriate behavior (Moghaddam et al., 2017). Sheraz and Najam (2015) conducted research to investigate the relationship among parenting styles, parenting practices, ADHD and ODB. For this study I have focused on parenting styles and oppositional defiant behavior only. Notable outcomes of the research indicated significantly correlated relationships between authoritarian/ permissive styles with ODB. Additionally, the relationship between boys' oppositional defiant behavior towards adults and authoritarian and permissive parenting were significant.

Similarly, Cruz-Alaniz, Martin, and Ballabriga (2018) examined the role of parenting executive functioning, warm and harsh parenting, and ODD symptoms. Within the literature it

was noted that ODD symptoms have been found to be most related to negative parenting. There were no findings of a reciprocal relationship between parenting styles and ODD. However, Shukla and Agarwal (2018) highlight a possible bidirectional impact noting child behavior impacting parenting styles.

Granero, Louwaars, and Ezpeleta (2015) used pathway analysis to investigate parenting style as a mediator of ODD with considerations for SES as an independent variable. 622 preschoolers were sampled. Results indicated that SES and executive function (inhibition and emotional control) had a direct effect on ODD in boys. SES and high ODD scores were partially mediated by difficulties in executive functioning in inhibition. However, corporal punishment and inconsistent discipline did not significantly impact the association of SES and ODD. Granero et al. found that SES is a good indicator to identify children at high risk for ODD. High ODD symptom levels were predicted by low SES levels and related to previously reviewed research related to ODD symptomology. This research supports the need for further exploration of the moderating effect of SES and on the relationship between parenting styles and level of EI as factors which impact the development and sustainability of mental health disorders.

SES and Parenting Styles

SES is comprised of both economic and social standards by which individuals and families are recognized (APA, 2018). It is defined by an individual, or group's, position or class within a hierarchical social structure. SES is most widely used in research from an objective standpoint (Roubinov & Boyce, 2017). Hierarchy in the social structure depends on a combination of variables including: occupation, education, income, wealth, and place of residence. As explained by Troy, Ford, McRae, Zarolia, and Mauss (2017), families with low

SES have limited environmental control whereas families with higher SES have more control over their environment. Neighborhood and community connections are assets which add to or take away from the overall functioning of families. SES can have a remarkable impact as persons with low SES will have limited resources as well as exacerbating economic and social circumstances. Comparatively, higher SES families will likely have an abundance of resources as well as less financial and environmental stressors (Çalik-Var et al., 2015; McLoyd, 1990). When considering the effect of socioeconomic influences, it can be concluded that economic and sociological hardships have detrimental effects on family systems.

Parents, as a part of the family system, provide the model and foundation for the overall development within children in addition to school and community factors (Troy et al., 2017). Socioeconomic status and parenting style have been linked to address academic performance, aggression, socially appropriate behaviors, and overall mental health (Argyrious et al., 2016; Troy et al., 2017). McLoyd (1990) noted "poverty and economic loss diminish the capacity for supportive, consistent, and involved parenting" (p.312). Historically, low-income families are seen as having more discord and dysfunction within their families (Çalik et al., 2015; McLoyd, 1990). In comparison, wealthy families are seen as having more structure and compliance. Socioeconomic hindrance can be associated with quick onset and longevity of mental health impairments as well. It is assumed that parents who are more financially well off can provide resources needed to contribute to more positive development while parents who are considered low income lack the finances to procure resources which contribute to healthy child development (Boe et al., 2014). Less access to resources and fewer choices are identified as factors which relate to external restrictions on behavior and decision-making skills.

Anton, Jones, and Youngstrom (2015) conducted research to identify relationships between parenting style and socioeconomic status, particularly for the single parent. The authors found that there was no significant connection between incomes and parenting styles. The income ranged between $0-85,000 and parents reported having 2.6 children on average. Even though there was no interaction between education and income of the parent on parenting styles, it was still shown that education and parenting style were significantly related. Comparably, September, Rich, and Roman (2016) completed related research looking at the role of parenting styles and SES as it related to parent's knowledge of child development associated to parent education. The authors reported that parental knowledge is an important factor in adopting positive parenting styles. A correlational-comparative research design was used to gather information from 140 parents. Parents were required to have at least one child between the ages of 2 years and 5 years. Low and high socioeconomic groups were utilized, and findings indicated that parents from low SES groups were more knowledgeable about child development while parents from high SES groups were less knowledgeable. However, all parents identified themselves as using an authoritative parenting style.

Baumrind (1978) noted that low-income families were more prone to use harsher punishments in comparison to wealthy or well to do families. In addressing the onset and instability of positive parenting, Azad, Blacher, and Marcoulides (2014) used a longitudinal model of socioeconomic status and sampled 219 mothers across six time points. Positive parenting was identified as being more sensitive, having a more positive affect, and a healthy attachment similar to the authoritative parenting style. Mothers with more education and income were found to have elevated levels of positive parenting and consistency of positive parenting

over time. Azad et al. noted that there is limited exploration of economic adversity related to education and income. The findings showed that there is both a direct and indirect impact of SES on positive parenting.

Parenting style is important in the shaping and development of skills in young children (Masud, Ahmad, Jan, and Jamil, 2016). However, parenting style is often shaped by the parent's personal experiences and ability to manage emotions. In a review of 59 articles, Devenish, Hooley, and Mellor (2017) identified risk factors for negative adolescent outcomes including disorder in the home, community violence, and economic stressors. It was found that these factors are often mediated through parental mental health issues and parenting practices. However, Masud et al. (2016) found limited consistency in findings to support relationships between parenting styles and academic performance mediated by socioeconomic status. Roubinov and Boyce (2017) argued that existing research on SES and parenting uses a limited scope exploring parenting as a mediator for socioeconomic influences in child development. Roubinov and Boyce identified four factors which mediate or moderate the SES-parenting relationship: parent distress and mental health problems, access to resources, parental knowledge and expectations of childrearing and child development, and cultural norms and values. The authors discussed limitations in current research which directly address the relationships between SES and parenting. Therefore, more exploration is needed to study the moderating effect of SES on the relationship between parenting style and level of EI in young children diagnosed with ODD.

Emotional Intelligence and Parenting Styles

Some current research suggests that parenting styles is related to EI in adolescents (Argyrious et al., 2014: Batool & Bond, 2015; Cindea, 2015). In a study completed by Batool and Bond (2015) it was recommended that parents receive emotional training to decrease the incidence of adolescent aggression and improve parenting styles. The researchers explored the relationships between parents EI and aggression in adolescents. A mediational path analysis was utilized, and it was found that parental EI indirectly relates to aggression in children. This study had limitations in relation to the proposed research as it did not discuss the child's EI. However, the article contained information related to the effects of parenting styles on children's behavior and noted significant correlations between parenting style, parents EI, and aggression in children although parenting style was not stated as a mediator. Cindea (2105) agrees that a tolerant and affectionate parent is correlated with higher EI in the parent and ultimately decreased maladaptive behavior in children as well as improved emotional control.

In a study of 187 adolescents Cindea (2015) explored self-esteem and levels of EI and how levels of EI are correlated with perceived parenting styles of mothers. For the purpose of this research the researcher used only information related to EI and parenting styles. Statistical data showed positive and negative correlations between parenting styles and EI and self-esteem. Comparatively, Alegre (2012) noted the lack of research related to parenting styles and EI. The researcher found no significant correlation between EI and positive and negative parenting and no correlation between EI and the four parenting styles. Alegre concluded that children's EI development may be impacted by parental emotional well-being but not directly impacted by

parenting styles. In addition, only mothers of the children were studied here, limiting the knowledge of fathers in this area.

Argyrious et al. (2014) referenced Alegre's (2012) work in their research noting the lack of research to explore the relationship between parenting styles and EI. In their more current research, Argyrious et al. (2014) found that authoritative parenting and trait EI are positively associated and authoritarian parenting and EI are negatively associated. Furthermore, Dunsmore et al. (2013) explored the impact of parental emotion coaching as a protective factor for children diagnose with ODD. The sample consisted of 72 mother-child dyads and explored the relationship between emotion coaching (parents) and emotion regulation, liability, and negativity (child). Dunsmore's et al. research revealed some patterns in the literature related to a lack of focus on emotion regulation as a contributor to ODD symptomology. However, the researcher highlighted emotion regulation as a key factor in internalization of ODD symptoms and adaptive skills. Emotion coaching was directly associated with increased emotion regulation and decreased disruptive behavior in children.

Summary and Conclusions

As expressed through the literature there is an abundance of research which addresses each variable (parenting styles, SES, EI, and children ages 4-8 diagnosed with ODD) individually but limited research that draws connections between the variables. There is no found research which identified the moderating effect of SES on the relationship between parenting styles and level of EI in young children, ages 4-8, diagnosed with ODD. The lack of current literature supports the need for additional research to address the proposed problem and the gap in literature. Some of the major themes highlighted included: parenting styles as a significant

contributor in child development, SES impacting parenting styles, and lower EI in children with ODD.

I found that there is current research which identifies connections between parenting styles and the development of EI in children (Cindea, 2015; Argyrious et al., 2016). Comparatively, EI and ODD share some correlation related to the lack of emotional regulation as part of the symptomology (Cavanaugh et al., 2017; Leadbeater & Ames, 2017). SES has also been explored to address the interaction between parenting styles and ODD. Currently, it is known that parenting styles directly affect child development and how a child may be emotionally engaged with others (Çalik et al., 2015; McLoyd, 1990; Troy et al., 2017). However, current research does not confirm an interaction between parenting styles and SES specifically on the development of EI in children with ODD.

This study fills a gap in the literature by providing information which addresses the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. The study provides content to inform future interventions related to parenting styles, EI, and ODD to potentially minimize stability of symptoms overtime and eliminate the development of comorbidity. Chapter 3 addresses the specific methodology which was utilized in the study.

Chapter 3: Methodology

The purpose of the study was to determine if SES moderates the relationship between parenting styles and the level of EI in young children diagnosed with ODD. Based on the EI theory (Mayer & Salovey, 1990) it may be possible that understanding EI in children with ODD could help reduce future psychological and social problems. Higher EI increases the likelihood that someone will be more effective in managing their emotions and more adaptable to their environment (Cindea, 2015). This chapter includes an examination of the research design and rationale. The researcher also reviews the methodology in relation to participant selection, instrumentation, sampling and the data analysis plan.

Research Design and Rationale

The study was used to identify if there is a significant relationship between parenting styles and EI in young children diagnosed with ODD and if SES moderates the relationship between parenting style and level of EI in young children diagnosed with ODD. The research questions were utilized to direct the research involving the noted variables and to direct the data collection process. The study was guided by the following quantitative research questions:

1. Is there a significant relationship between parenting styles and level of emotional intelligence in young children diagnosed with ODD?
2. Does SES moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD?

The researcher utilized a quantitative, correlational research design to determine the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. Quantitative research is used to collect, measure, and

analyze data and to ultimately generalize results to the sampled population (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). There were no noted time or resource constraints which are consistent with the design choice. This type of research design is often used with a large population and is formatted using hypotheses. Statistical analyses are used to prove or disprove the noted hypotheses. Quantitative research is utilized to advance knowledge across several disciplines based on the ability to use sample populations and generalize results to the intended population as a whole. The use of this design allows researchers to gain understanding, measure information, and explore relationships among varying variables. Quantitative, correlational research design allows the researcher to build on existing knowledge and further explain relationships.

Rationale for the Methodology

A quantitative research design, using cross-section survey method, was selected over qualitative or mixed methods design. Quantitative research is important because the study findings can be generalized to the larger population without sampling each person individually (Frankfort-Nachmias et al., 2015). This type of research design includes numeric values and statistical analysis which help to identify attitudes, relationships, and trends in data. Qualitative research designs such as: ethnography, narrative, phenomenological, grounded theory, and case study are utilized to gain insight into personal life experiences and their meanings. These types of research designs elicit subjective information from the participants and cannot be generalized to the larger population. Mixed methods research combines both quantitative and qualitative research design to collect and analyze data. Based on the nature of the study, to identify the moderating effect of SES on the relationship between parenting styles and the level of EI in

young children diagnosed with ODD, mixed methods design was not appropriate. Quantitative research was most appropriate to gather objective data in a controlled manner to identify predictive values, variances, relationships, among the noted independent variables and dependent variables.

Methodology

Selecting an appropriate research design was important in the types of information and data which were collected. In order to obtain information related to parenting styles, SES, and EI in young children diagnosed with ODD a quantitative survey method was utilized. Using this method allowed the researcher to have consistency across participants as each parent received the same survey tool to gather the necessary data. Additionally, the survey tools used are valid and reliable instruments used in previous research (Kajbafnezhad, 2016; Robinson, Mandleco, Olsen, & Hart, 1995; Singh et al., 2017).

Population

The identified population consisted of parents within the Philadelphia, Pennsylvania area that have young children (4-8 years) that have been diagnosed with ODD; the target population size was unknown. The researcher utilized an agency which offers Behavioral Health and Rehabilitation Services (BHRS) as well as outpatient services to children and families in the city of Philadelphia to gain a sample of parents who have young children, ages 4-8, diagnosed with ODD. The primary caregiver was chosen to complete the survey. Using the primary caregiver was beneficial as this person has spent the most time with the child and has been a direct influencer and teacher through their parenting style.

Inclusion criteria for the study included: families who reside in Philadelphia, Pennsylvania, have at least one young child (aged 4-8) living in the home who has a diagnosis of ODD, and can speak/read English. These criteria were identified based on agency files. The families were current clients of the agency. Clients were informed that participation does not positively or negatively impact their current quality or level of service/care from the agency. The surveys were anonymous and verbal consent was given by participants.

Sampling and Procedures

A nonprobability sampling plan was used to gather participants. Nonprobability sampling methods are most convenient when there is likelihood that the sample may be insufficient if chosen randomly (Frankfort-Nachmias et al., 2015). Based on limited availability of participants, the researcher chose this sampling method as most suitable for the study. More specifically, a convenience method was used to increase the participation and collect data from available persons. Although this technique has limitations, such as overrepresentation, the benefits include: less time, fewer persons to handle the data and the overall process, and more convenient access to the sample. Participants who met the criterion were asked to participate by the researcher. Flyers were also posted at the agency. Any participants who currently or previously worked with the researcher were not selected and used in this study.

Sample Size

Sample size was calculated using an a priori sample size calculator for multiple regression (Soper, 2018). The minimum required sample size calculated was 84 participants. The sample size was calculated using a medium effect size (0.15), statistical power level (0.8), number of predictors (4), and probability level (0.05). Effect size is important in determining the

meaningfulness of differences between variables (Cohen, 1988). Using Cohen's D effect size the following effect sizes are considered: small (0.02), medium (0.15), and large (0.35). The results have more significance based on the size of the effect size, the larger the better. The power level is the level which identifies a true difference in variables. Power level is normally a high percentage as researches want to identity statistically significant differences (.80) (Cohen, Cohen, West, & Aiken, 2003). The alpha level or *probability level* refers to the rate of a type I error. This percentage determines the amount of error that was allowed. The alpha level is set at .05 (5%). This means that there is a 5% chance that the results of the analysis are not contributed to the independent variables. In most social science research, an alpha level less than .05 is acceptable.

Procedures for Recruitment, Participation, and Data Collection

Participants were recruited using the selected agencies database of participants for behavioral health services. The participants were identified based on agency files which were used to distinguish between criteria as noted previously. These databases have information in reference to child's age, diagnosis, and spoken/read language of the parents or caregivers. When the participants were identified as eligible to participate based on criterion, the researcher invited participants to voluntary participate in the study. Parents of young children (ages 4-8 years) were selected using non-probability sampling procedures. Once the participants were identified they were asked to voluntarily participate in the study. The participants were informed that their participation did not have a positive or negative impact on their current treatment or care. Additionally, they were provided information about informed consent which outlined the confidentiality of their responses on the surveys. The informed consent was given verbally as the

surveys were anonymous. Once the participant agreed to participate, they were asked to complete three surveys provided by the researcher.

The data was collected once from each individual participant. Completion of the surveys took about 15-20 minutes to complete. After the surveys were completed the participants were given the option to get the researchers contact information to contact for research findings, if interested, at later date. No follow ups were needed for the intended research.

Data Analysis Plan

The researcher used a multiple regression analysis with a moderator variable to analyze the data. The statistical package for the social science (SPSS) was used to input data. After the data had been collected the researcher input the information into SPSS using a multiple regression analysis with a moderator variable. The researcher cleaned the data by checking that data was inputted correctly and identified missing or abnormal data from the scales. To screen the data, the researcher addressed assumptions such as: identifying outlier, checking for normality, multicollinearity, and homoscedasticity (Cohen & Cohen, 1983; Cohen, et al., 2003). The researcher quantitatively analyzed and interpreted the results based on the research question and hypotheses.

First, SES and Parenting Style variables were computed to create a new interaction variable PSxSES. The new interaction (or moderator) variable (SES x parenting style) in addition to the independent variables (SES and parenting styles) and the dependent variable (EI) were entered into the regression analysis. In block 1, SES (MV), parenting styles (IV) and EI (DV) were entered into the analysis. In block 2, SES (IV), parenting styles (IV), PSxSES (MV), and EI (DV) were entered into the analysis. Results of the multiple regression analysis were interpreted

based on the output provided by SPSS. The moderated multiple regression analysis was used to determine the amount of variability that each independent variable contributed to the dependent variable and the differences. The following research questions and hypotheses guided the study:

Research Question 1: Is there a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD?

$H_0$1: There is no significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

H_a1: There is a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

Research Question 2: Does SES moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD?

$H_0$2: SES does not moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD.

H_a2: SES does moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD.

The research consisted of one independent variable (Baumrind's 3 parenting styles), a moderating independent variable (SES), and a dependent variable (EI). Based on the current research questions and hypotheses addressing the relationship between the predictor and dependent variables with a moderating variable, the researcher chose to use multiple regression analysis. The analysis was used to identify the relationship between multiple independent variables and one dependent variable (Cohen & Cohen, 1983; Cohen, et al., 2003).

Instrumentation

The instruments used for the research were all found online and permission for surveys was obtained by email. Each instrument was selected based on the relevance to independent variables and dependent variable identified in the research. The scales were all noted as valid and reliable based on the review of literature.

Kuppuswamy's Socioeconomic Scale

Kuppuswamy's socioeconomic status scale (Singh et al., 2017) was used in the study to identify demographic information of the parent/family. The original scale was developed by Kuppuswamy in 1976, however it was reevaluated for accurate income validity due to economic changes over time. The scale was first introduced in 1976 in India. The scale was used to identify social status related to five categories: upper, upper middle, lower middle, upper lower and lower. Additionally, the developer focused on gaining socioeconomic information from families living in urban and peri-urban areas. The scale is comprised of three areas: the level of education of the Head of the household, the occupation of the head of the household and family income.

As noted by Singh et al. (2017) the scale is based on valid and reliable testing. Kuppuswamy's socioeconomic scale (1976) has been mentioned in several articles which identify the scales frequent use in past and current research over the last 30 years (Bairwa, Rajput, & Sachdeva, 2013; Sharma, 2017; Sharma & Saini, 2014; Singh et al. 2017). In a recent update of the scale Sharma (2017) noted the current revisions enhance the validity of Kuppuswamy's socioeconomic scale. For each category (education, occupation, and income) the higher the achievement the higher the numbers were. For example, "illiterate" received a score of

1 while “graduate degree” received a score of 6. Additionally, income information was updated to reflect yearly income.

Kuppuswamy’s socioeconomic scale (1976; 2017) is comprised of three areas of questioning: (A) education of head: post-graduate or professional degree (1), graduate degree (2), higher secondary certificate (3), high school certificate (4), middle school certificate (5), literate, less than middle school certificate (6), and illiterate (7), (B) occupation of head: professional (1), semi-professional(2), arithmetic skills jobs (3), skilled worker (4), semi-skilled worker (5), unskilled worker (6), unemployed (7), and (C) family income per year (total family income (1-12). The results of the socioeconomic survey provided the socioeconomic status of the families which were broken down into five categories: upper (1), upper middle (2), lower middle (3), upper lower (4), and lower (5).

Parenting Styles and Dimensions Questionnaire (PDSQ)

The Parenting Styles and Dimensions Questionnaire (PDSQ) (Robinson et al., 1995) was utilized in the study to collect data related to parenting style. The PDSQ is a validated instrument. It is categorical and consists of thirty-two questions. A Likert scale is used to examine three styles of parenting: authoritative, authoritarian, and permissive. The Likert scale ranges from 1-5, 1 being “never” and 5 being “always”. This scale is a self-report questionnaire and was used to categorize the primary caregiver into one of the three styles of parenting: authoritative, authoritarian, or permissive.

In the development and implementation of the PDSQ 1251 parents of preschool and school aged children were sampled (Robinson et al., 1995). 133-items were assessed using principle axes factor analyses and varimax rotation. Cronbach alpha was utilized to determine

reliability and 62-items were identified for the final development of the scale. Cronbach alpha was determined for authoritative (.91), authoritarian (.86), and permissive (.75) items. Sets of questions to be included were identified using the current literature at the time of development and theoretical correspondence to Baumrind's parenting style typologies.

The Parenting Rating Scale from Children's Emotional Intelligence (4-8)

The Parental Rating Scale from Children's Emotional Intelligence (4-8) (Kajbafnezhad, 2016) was utilized in the study to assess the level of EI in young children 4-8 as reported by their parent or primary caregiver. This instrument is validated and made up of 45 questions. The scale is used to assess levels of EI in children 4-8 years based on three underlying factors: expressing and perceiving emotion, emotional understanding and evaluating, and emotional management and regulation. Although there are three factors, there is an overall score, which is a continuous number for EI. The scale is provided to the parent who rates each item (45 questions) using a 3-point Likert scale (3-always, 2-sometimes, and 1-never). The sum of the scales items was continuous (interval/ratio) and used to identify the level of EI displayed by each child.

During the original development of The Parental Rating Scale from Children's Emotional Intelligence (4-8) 330 mothers with children 4-8 years were identified using cluster random sampling (Kajbafnezhad, 2016). An exploratory factorial analysis method was utilized to extract 45 questions of 104. Questions were examined by psychological and educational training experts. Psychometric analyses were used to determine the validity and reliability of the scale. The reliability coefficient was .86 for the questionnaire. Kaiser, Mayer, and Oliken test was used for data analysis (.855) and the Bartlet sphericity test was used for sample adequacy. In total 22.11 percent of variance was found.

Threats to Validity

Threats to validity can impact study results and must be carefully identified (Babbie, 2010). Potential threats to internal validity include lack of honesty in reporting parenting styles or child behavior. Parents may have reported what is believed to be appropriate as opposed to accuracy. To minimize this occurrence the researcher provided clear and concise informed consent to advise participants of the confidentiality of their responses. One potential threat to external validity included population validity and the lack of sufficient responses. However, the researcher gathered the necessary amount of responses from the participants. There were no noted or expected threats to construct validity.

Ethical Procedures

In conducting research potential ethical issues should be anticipated. Approval from the IRB of the data collection recruitment and process is important in moving forward with the intended research. The following considerations were identified and cautioned to address ethical issues during this process. The researcher gained written (and signed) permission to partner with the agency and use the client base for the intended purposes of the research. Each participant was informed of the informed consent and verbal consent was given. Each participant was informed of their rights as a participant in the study and informed that treatment will not be positively or negatively impacted by their participation. Participants were informed that their responses were shared with the researcher, for the purpose of the research. However, their names or the names of their children shall not be disclosed in the study. Surveys were kept in a locked file for privacy and security of information. Participants did not receive incentives or compensation for their

participation in the study. Additionally, the researcher conducted the research within their work environment. Therefore, no clients, past or present, of the researcher were used in the study.

Summary

The quantitative correlational research method was used to answer the following research questions:

1. Is there a significant relationship between parenting styles and level of emotional intelligence in young children diagnosed with ODD?
2. Does SES moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD?

After gaining IRB approval, the researcher provided flyers to agency staff to display in the office and collected names of participants who met the inclusion criteria including: parents of children 4-8 years old, diagnosed with ODD, living in the Philadelphia area. In addition, the parents were expected to read and speak English. The researcher collected the surveys from the participants in person and through a locked agency drop box.

The researcher continuously reviewed and considered ethical concerns and/or incidents which may have occurred and secured all documentation (surveys and participant information). Research procedures were documented throughout the process to ensure credibility of data and results. Chapter 4 highlights and outlines the data collection process and results of the research.

Chapter 4: Results

The relationship between parenting styles (authoritative, authoritarian, and permissive) and EI was analyzed to determine the moderating effect, if any, of SES. The study was conducted to gain further insight into the relationship between Baumrind's (1978) three parenting styles and levels of EI in young children diagnosed with ODD. Past and current research has shown limitations in the area of study as well as with children aged 4-8 (Çalik et al., 2015; McLoyd, 1990; Troy et al., 2017). SES was used as a potential moderator as studies show that SES can play a significant role in parenting style as well as overall child development (Çalik-Var et al., 2015; McLoyd, 1990; Troy et al., 2017).

This chapter contains an analysis of the findings of the study. I will provide detailed explanations of the process including data collection techniques, findings of the multiple regression analysis, and a summary. The research is guided by the following quantitative research questions:

Research Question 1: Is there a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD?

$H_0$1: There is no significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

H_a1: There is a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

Research Question 2: Does SES moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD?

$H_0$2: SES does not moderate the relationship between parenting style and

the level of emotional intelligence in young children diagnosed with ODD.

H_a2: SES does moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD.

Data Collection

After gaining approval from Walden's IRB (02-21-19-0536367) to conduct the study, I began to gather information from potential participants who met the criteria. Eligible participants were parents of children aged 4-8 with a diagnosis of ODD. Parents were required to read and speak English. Data collection took about three weeks and 85 completed surveys were collected. The calculated sample size for a medium effect size was 84, therefore sample size requirements were met. Participation was voluntary and all participants were educated about the informed consent. Names of participants were not utilized; therefore, consent was provided verbally. About 100 families were contacted during the data collection process. However, only 85 (85%) surveys were returned or completed. There were no discrepancies in the data collection process.

Results

The sample included 85 (n = 85) parents. Data related to race and ethnicity were not gathered. However, the SES survey was used to collect data related to level of education, occupation, and yearly income. More than half, 55.3% (N = 47), of the sample were rated as "Upper Lower" which is the second lowest SES level on Kuppuswamy's Socioeconomic Scale (Singh et al., 2017). The next level "Middle" accounted for 20% (N = 17) of the sample size, and "Upper Middle" accounted for 24.7% (N = 21) of the sample. The lowest ("lower") and highest ("upper") SES categories were not accounted for in the data collection sample. The sample size was calculated using a medium effect size (0.15), statistical power level (0.8), number of

predictors (4), and probability level (0.05). As noted in chapter 3, the target population size was not identified. However, the calculated sample size for the study was 84 participants and 85 completed surveys were collected.

Assumptions

There are several assumptions which need to be met to identify the usefulness of the data. Assumptions analyzed included: linearity, independence of errors, undue influence, normality, multicollinearity, and homoscedasticity (Cohen et al., 2003). Prior to conducting the complete multiple regression analysis, I tested assumptions to ensure that the data was useful to answer the research questions. Meeting these assumptions shows that the data is free of bias, that participants have responded independently, that there is consistent variance of errors within the independent variables, and that independence of the effects of the independent variables. All assumptions were met and will be further explained below.

Linearity. Linearity was used to ensure that the relationship between the variables is linear (Cohen et al., 2003). This assumption is important to determine if there is bias in the data. Linearity in the data is helpful in accurately estimating the relationship between variables. However, the results are more accurate when the relationship in the dependent and independent variables is linear. If the assumption of linearity is violated it can be assumed that there is bias in the data and the data can be inaccurately estimated. A u-shaped line would violate this assumption, the representation of the data following a line represent linearity in the data. The assumption was tested using a scatterplot as shown in Figure 1. Data points follow a line closely to show linearity.

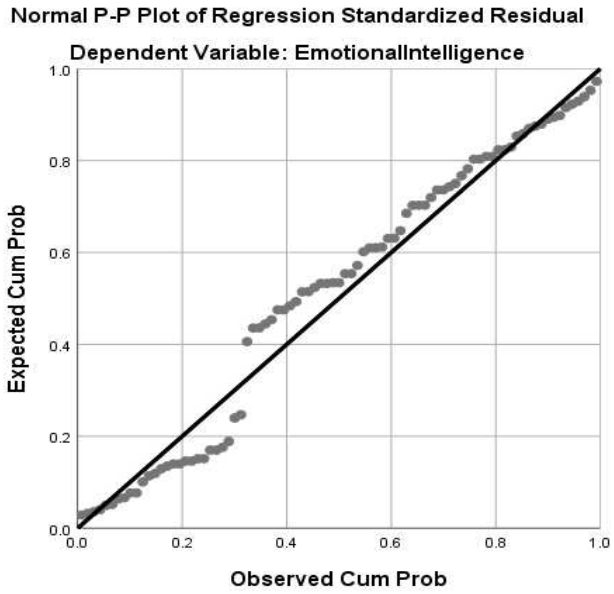

Figure 1. Scatterplot of expected and observed standardized residuals for the dependent variable emotional intelligence.

Independence of errors. Independence of errors assumptions refers to the relationships in the population (Cohen et al., 2003). The goal of meeting this assumption is to ensure that errors are independent of one another. A Type I error is common when independent of errors is violated and the risk of inaccurate significance tests increases. Standard errors could be miscalculated. Therefore, erroneous statistically significant results may be reported. This statistic is valued from 0.0 to 4.0, with a value of 2.0 indicating no correlation between the residuals. Values below 1.0 and above 3.0 are considered problematic and shows the model has serial correlation. The Durbin-Watson statistic was used to identify if the assumption was met. The output of the Durbin-Watson statistic (shown in Table 1) was 2.53 which is close to 2 and therefore the assumption has been met.

Table 1

Summary of Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.219[a]	.048	.025	10.093	2.531

a. Predictors: (Constant), Parenting Styles, SES

b. Dependent Variable: Emotional Intelligence

Undue influence (outliers). The assumption of undue influence is caused by outliers and this is tested by Cook's distance. Here, values of 1.0 or greater are problematic and diagnostics should be performed to determine if there is undue influence. Cook's distance was calculated using SPSS, the minimum and maximum did not meet or exceed a value of 1.0. This assumption has been met.

Table 2

Summary of Residual Statistics Using Cook's Distance

	Minimum	Maximum	Mean	Std. Deviation	N
Cook's Distance	.000	.097	.013	.019	85

a. Dependent Variable: EI

Homoscedasticity. Homoscedasticity refers to unequal variance of residuals (Cohen et al., 2003). It is assumed that errors are distributed consistently among the independent variables. When this assumption is violated it weakens the analysis and undermines the statistical significance of the relationship between variables. Violation of the assumption can be determined by identifying any residuals are heavily weighted on either end of the horizontal line. A scatterplot (Figure 2) using standardized residuals (y-axis) and standardized predicted value

(x-axis) was used to test the assumption. There are no signs of funneling, therefore the assumption has been met.

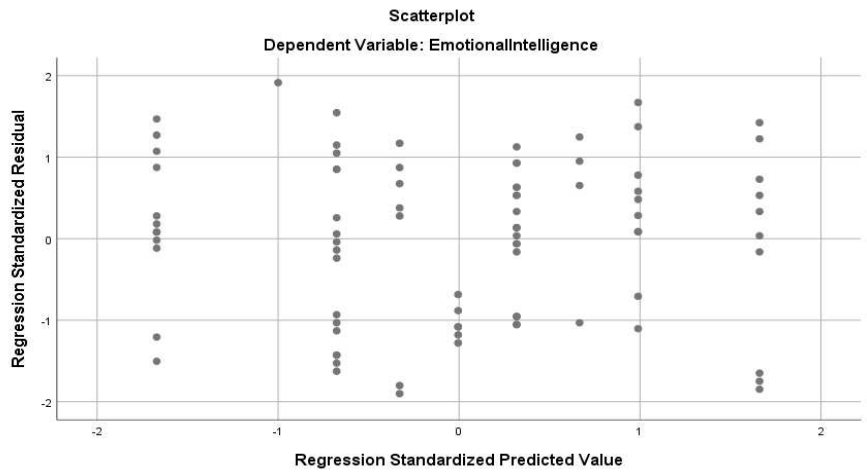

Figure 2. Scatterplot which displays the regression standardized residual and regression standardized predicted value.

Collinearity. Collinearity (or multicollinearity) refers to high levels of correlation or linearity between independent variables (Cohen et al., 2003). If variables overlap more frequently the inferences of cause and effect are limited. Overlapping makes it difficult to determine which variable has a more significant effect. Although variables can be correlated, high correlation violates the assumption and may weaken the results. Overall, independent variables should be correlated with the dependent variable as opposed to each other. Values close to and above 10 mean the independent variables have a high level of correlation and the assumption would not be met. As shown in the table 5, VIF scores are below 10 and tolerance scores are above 0.2 (statistics=1.00 and 1.00). The analysis of collinearity statistics show that this assumption has been met.

Table 3

Summary of Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	SES	.998	1.002
	Parenting Styles	.998	1.002

a. Dependent Variable: Emotional Intelligence

Normality. Normality refers to the normal distributions of variables, when plotted there is a natural curve (Cohen et al., 2003). As with other assumptions, if the distribution is non-normally distributed the relationships and significance tests can be estimated inaccurately. If there are outliers outside of the natural curve there is a possibility that Type I and Type II errors may be present. A histogram was used to asses normality in the data. Data within or close to the boundary of the bell curve signify normal distribution.

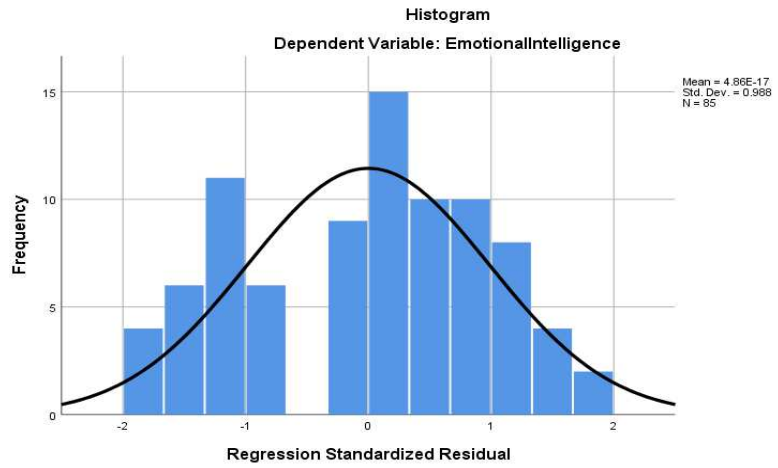

Figure 3. Histogram which displays the curve of the data. Data within or close to the boundary of the bell curve signify normal distribution.

Data Coding

The data set was derived from three surveys: Kuppuswamy's socioeconomic scale (Singh et al., 2017), Parenting Styles and Dimensions Questionnaire (Robinson et al., 1995), and Parent Rating Scale of Emotional Intelligence 4-8 (Kajbafnezhad, 2016). The first scale, Kuppuswamy's Socioeconomic Scale, was composed of three questions: education of head of household, occupation of head of household, and family income per year. The results were coded based on a total score between 3-29. The levels identified for SES scale included 1-upper, 2-upper middle, 3-lower middle, 4-upper lower, and 5-lower. The score of Kuppuswamy's scale was used to determine each participants level upper (26-29, upper middle 16-15, lower middle 11-15, upper lower 5-10, and lower <5). The value for each level was coded in SPSS using the associated numbers 1-5 as listed above.

The second scale, Parenting Styles and Dimensions Questionnaire (Robinson et al., 1995) consisted of 32 questions. The questions related to Baumrind's (1978) three parenting styles; authoritative, authoritarian, and permissive. A Likert scale was used to examine three styles. The Likert scale ranged from 1-5, 1 being "never" and 5 being "always". Parenting styles were obtained using the highest score of the three styles. Scores from each set of questions were divided by the number of questions to gain a score. The parenting styles variable was coded using values 1-3 (1-authoritative, 2-authoritarian, and 3-permissive).

The last scale, Parent Rating Scale of Emotional Intelligence (Kajbafnezhad, 2016) included 45 questions to be answered using a Likert scale (1-Never, 2-Sometimes, and 3-Always). Scores for questions related to the appropriate expression and perception of emotion, emotional understanding and evaluating, and emotional management and regulation were added

and determined to be positive numbers (+). Scores for questions related to the deficits in expression and perception of emotion, emotional understanding and evaluating, and emotional management and regulation were added and determined to be negative numbers (-). Scores in the data set ranged from -12 to 27. Lower scores were correlated to lower levels of EI. Higher scores were correlated to higher levels of EI. Each participant's data set included three scores to represent two independent variables (SES and parenting styles) and one dependent variable (EI).

A multiple regression analysis was used to assess assumptions of the data. All assumptions were met as outlined below. The assumptions of multiple regression were assessed before performing the full analysis to ensure that each one was met to limit weak or inaccurate estimates of the data. Using the enter method, it was found that parenting style did not explain a significant amount of variance in the level of EI in young children diagnosed with ODD ($F(2, 82) = 2.069$, $p = .13$, R square =.048). However, an additional analysis was used to assess the moderating effect, if any, of SES on the relationship between parenting style and level of EI in young children diagnosed with ODD.

Statistical Analysis

A moderated multiple regression (MMR) analysis was conducted to analyze the data. The following research questions and hypotheses were used:

RQ1: Is there a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD?

$H_0$1: There is no significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

H_a1: There is a significant relationship between parenting style and level of emotional intelligence in young children diagnosed with ODD.

RQ2: Does SES moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD?

H_02: SES does not moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD.

H_a2: SES does moderate the relationship between parenting style and the level of emotional intelligence in young children diagnosed with ODD.

The independent variables were SES and parenting styles. An interaction term was created to assess the moderating effect, if any, of SES. Therefore, PSxSES was the additional variable. SES was broken down into five levels (1-upper, 2-upper middle, 3-lower middle, 4-upper lower, and 5-lower). Parenting styles was broken down into three levels (1-authoritatve, 2-authoritarian, and 3-permissive). The dependent variable was level of EI which was identified by one total score ranging from -12 to 27. The data was analyzed using values from the three surveys (Kuppuswamy's Socioeconomic Status Scale (Singh et al., 2017), Parenting Style and Dimensions Questionnaire (Robinson et al., 1995), and Parent Rating Scale of Emotional Intelligence 4-8 (Kajbafnezhad, 2016). Therefore, each participant had a total of three factors for input into the analysis.

To test the hypothesis that parenting styles impact level of emotional intelligence in young children diagnosed with ODD, and whether SES moderates the relationship between parenting styles and level of emotional intelligence in children with ODD, a multiple regression analysis with a moderator variable was conducted. The overall model was not significant, R^2 =

.048, $F(3, 81) = 1.36$, $p = .998$ (see Table 4). SES did not significantly increase or decrease the strength of the relationship between parenting styles and EI in young children diagnosed with ODD.

A moderated multiple regression analysis, with an interaction variable, was run to assess the relationship between parenting styles and level of EI in children diagnosed with ODD and the moderating effect, if any, on the relationship of the level of EI in children diagnosed with ODD. First, I computed SES x Parenting Styles to create a new interaction variable. The new interaction (or moderator) variable (SES x parenting style) in addition to the independent variables (SES and parenting styles) and the dependent variable (EI) were entered into the regression analysis (see Table 5).

The moderated multiple regression analysis was used to determine the amount of variability that each independent variable contributed to the dependent variable and the differences. The effect size 0.15 was used to assess a medium effect and an alpha level of 0.05 was chosen (see Table 5).

Table 4

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	421.426	2	210.713	2.069	.133[b]
	Residual	8352.998	82	101.866		
	Total	8774.424	84			
2	Regression	421.426	3	140.475	1.362	.260[c]
	Residual	8352.997	81	103.123		
	Total	8774.424	84			

a. Dependent Variable: EI

b. Predictors: (Constant), SES, PS

c. Predictors: (Constant), SES, PS, PSxSES

In the first block two variables were included: SES and parenting styles. SES and parenting styles alone were not significant predictors of level of EI in young children diagnosed with ODD, $R^2 = .048$, $F(2, 82) = 2.07$, $p = .133$. These variables did not account for a significant amount of variance meaning that they did not significantly increase or decrease level of EI in young children diagnosed with ODD.

A moderator variable SESxPS was created and entered into the second block. The moderator variable did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .001$, $\Delta F(1, 81) = .001$, $p = .10$, $b = -.001$, $t(84) = -.002$, $p = .998$ (see Table 5), meaning that SES did not significantly increase or decrease the strength of the relationship between parenting styles and level of EI in young children diagnosed with ODD.

Table 5

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.219[a]	.048	.025	10.093	.048	2.069	2	82	.133
2	.219[b]	.048	.013	10.155	.000	.000	1	81	.998

a. Predictors: (Constant), SES, PS

b. Predictors: (Constant), SES, PS, PSxSES

c. Dependent Variable: EI

The current model was consistent with the hypothesis that SES does not moderate the relationship between parenting styles and EI in children diagnosed with ODD. There was not a significant amount of variance in EI when the moderator variable was entered into the equation.

Summary

A moderated multiple regression analysis was conducted to answer the research questions:

RQ1: Is there a significant relationship between parenting styles and level of emotional intelligence in young children diagnosed with ODD?

RQ2: Does SES moderate the relationship between parenting styles and EI in young children diagnosed with ODD?

The null and alterative hypothesis were considered. Based on the statistically insignificant interaction between parenting styles and EI (RQ1) and SES and the relationship between parenting styles and level of EI in young children diagnosed with ODD (RQ2), I failed to reject both null hypotheses. SES was not indicated as a statistically significant moderator for the relationship between parenting styles and level of EI in young children diagnosed with ODD. In chapter 5 I will provide an interpretation of the findings, study limitations, and future considerations for research as related to levels of EI in young children diagnosed with ODD.

Chapter 5: Discussion, Conclusions, and Recommendations

Higher EI increases the likelihood that someone will be more effective in managing their emotions and more adaptable to their environment (Cindea, 2015). Based on the emotional intelligence theory (Mayer & Salovey, 1990) it may be possible that understanding EI in children with ODD could help reduce future psychological and social problems. The purpose of the study was to determine if socioeconomic status moderates the relationship between parenting style and the level of EI in young children diagnosed with ODD.

The research design was a quantitative study assessing the relationship between independent variable (parenting styles) on the dependent variable (EI), with a moderating independent variable (SES) (Babbie, 2010). This study allowed me to identify the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. I used a correlational approach to determine how factors are related because there are other factors which may be correlational and there may be difficulty in controlling for all contributing factors (Frankfort-Nachmias et al., 2005). In the study, there were no manipulation of variables; therefore, the study was nonexperimental.

I performed a moderated multiple regression analysis to first determine the significance of the relationship between parenting styles and EI in children with ODD and then to determine if SES moderates the relationship between parenting styles and the level of EI. The assumptions of the analysis were evaluated, and it was determined that all assumptions were met with the collected data. The significance levels of the independent variables were greater than the alpha level ($p > .05$) showing no statistical significance related to research questions 1 and 2. SES and

parenting style accounted for 4.8% of variance in the level of EI. The moderating variable did not significantly predict the relationship between the independent and dependent variable.

The interpretations and findings for the research questions and hypothesis are outlined in this chapter. The implications of the research are presented in connection to past and current research, theoretical frameworks, and implications for social change. The chapter covers limitations of the study as well as recommendations for future research.

Interpretation of Findings

The purpose of the study was to determine if SES moderates the relationship between parenting style and the level of EI in young children diagnosed with ODD. I identified SES as a potential moderating variable in the relationship between parenting styles and level of EI in young children diagnosed with ODD based on current and past literature. I used quantitative methods to answer the research questions as I wanted to gather data which could be generalized to the population using a sample of the population. This type of research design is often used to collect data as it relates to a larger population and to build on existing knowledge. The independent variable was parenting styles, the moderator variable was SES, and the dependent variable was EI. The target population were parents of children 4-8 years old, diagnosed with ODD. The participants were recruited through a behavioral health/mental health agency where they were receiving services.

The research questions were used to determine the moderating effect of SES on the relationship between parenting style and level of EI in young children diagnosed with ODD. SES can have a remarkable impact as persons with low SES may have limited resources as well as exacerbating economic and social circumstances (Çalik-Var et al., 2015; McLoyd, 1990).

Historically, low-income families are seen as having more discord and dysfunction within their families. Troy et. al. (2017) explained that neighborhood and community connections are assets which add to or take away from the overall functioning of families. In the current study, however, SES was not a significant moderator of the relationship between parenting styles and level of EI in young children diagnosed with ODD.

The current research both confirmed and disconfirmed some of the information found during the literature review in Chapter 2. In a study conducted by Anton et al. (2015), the researchers found that there were no significant connections between incomes and parenting styles. However, it was found that education and parenting style were significantly related. Azad et al. (2014) found that mothers with more education and income were found to have elevated levels of positive parenting and consistency of positive parenting overtime. Positive parenting was identified as being more sensitive, having a more positive affect, and a healthy attachment similar to the authoritative parenting style.

As stated in Chapter 4, more than half, 55.3% (N = 47), of the sample were rated as "Upper Lower". The next level "Middle" accounted for 20% (N = 17) of the sample size, and "Upper Middle" accounted for 24.7% (N = 21) of the sample. The lowest ("lower") and highest ("upper") SES categories were not accounted for in the data collection sample. When combining "middle" and "upper middle" (44.7%) sample, the percentage is lower than that of the "upper lower" (55.3%) sample. However, with a greater percentage of "upper lower" participants the relationship between parenting styles and the level of EI in young children diagnosed with ODD was not significantly impacted. Anton et al. (2015) supported these findings. Their study, to identify the relationship between parenting style and socioeconomic status, yielded no significant

connections similar to the current study. However, the researchers found a statistically significant relationship between education and parenting styles. It can be noted that although one factor of SES was not significant, testing individual factors (education, income, employment etc.) may yield different results.

When examining the impacts of the moderator variable (SES), current and past researchers have also reported significant impacts of SES on family structure and overall development. Socioeconomic status has been associated with academic performance, aggression, socially appropriate behaviors, and overall mental health (Argyrious et al., 2016; Troy et al., 2017). It has been concluded in some research findings that parents who are more financially stable are able to provide resources needed to contribute to more positive development (Boe et al., 2014). However, parents who are considered low income lack the finances to procure resources which contribute to healthy child development. Contrary to this research however, the findings of this study do not support a significant impact of SES on the relationship between parenting styles and level of EI in young children diagnosed with ODD.

Findings of the study indicate that SES does not moderate the relationship between level of EI in young children diagnosed with ODD. It can be concluded that SES may have a small insignificant impact on the relationship between parenting styles and the level of EI in young children diagnosed with ODD and further research should be conducted to explore this topic with more diverse demographics (as related to SES).

Theoretical Implications

Two theoretical frameworks were used during the study, Baumrind's Theory (1966) of parenting styles and Salovey and Mayer's (1990) model of emotional intelligence. Baumrind's

theory (1966) identifies styles of parenting which most resemble patterns of parental behavior based on child behavior. Research explored in Chapter 2 signify the relationship between parenting and child development, including emotional development. However, this significant relationship was not identified in the study. The level of variance identified in the analysis was not significant enough and therefore I failed to reject the null hypothesis.

Theory of parenting styles. Baumrind's (1966) theory of parenting styles identifies three distinct styles of parenting: authoritative, authoritarian, and permissive. Each style is defined based on a set of standard behaviors displayed by parents on a two-factor continuum of high demandingness vs. low demandingness and high responsiveness vs. low responsiveness (Baumrind, 1978). It has been noted that most positive outcomes for children tie into authoritarian parenting styles (Milevsky et al., 2007). Some distinctive characteristics of this parenting style include: warm responsiveness to child's needs and want high expectations, clearly identified rules, reinforced independence, and support (Baumrind, 1978). Findings suggest that parent style can have an impact on level of EI, however, the impact is not statistically significant in this study.

Emotional intelligence theory. Salovey and Mayer (1990) identified EI as the ability to recognize, incorporate, and understand emotions to stimulate growth in oneself. In relation to emotional development, they found that a person must be able to manage, perceive, understand and use emotions appropriately. It was noted that possession of these skills can enhance thought processes, social engagement, and adaptive behavior. Rodin and Salovey (1989) found that higher EI is associated with better intimate and family relationships, greater academic

achievement, and increased self-esteem while lower or limited EI is associated with insecurity, depression, poor social relationships, and academic failures.

Limitations of the Study

Study limitations can have varying impacts in the discussed research. First, the use of convenience sampling has potential bias as the population is sampled with the most accessible persons (Frankfort-Nachmias et al., 2005). Participants from the study were collected from one agency and similar demographic information was noted (SES). This can be identified as a limitation as other persons from varying SES categories were not accounted for in the study sample. Therefore, it must be questioned if the research can be generalized to other populations with mixed demographics (as related to SES). Second, surveys were provided to the family to complete independently. There may be reporting bias by families who did not report accurate information related to SES, parenting style, or child EI. Threats to validity were not specifically identified. However, if participants did not respond truthfully to the surveys this could have impacted the overall data.

Overrepresentation was noted as a limitation in the study as more than half of the study participants were identified as “upper lower” SES. This limitation was noted prior to the study as overrepresentation is a potential outcome of utilizing a convenience method. Additionally, the limited use of The Parental Rating Scale from Children’s Emotional Intelligence (4-8) can be noted as a limitation to the study. Although a review of literature shows validity and reliability of the scale there is limited research to support ongoing usage.

Recommendations

The current research accounted for samples from upper lower, middle, and upper middle SES. One of the limitations of the study included limited economic diversity as more than half of the sample were drawn from "upper lower" SES participants. A study completed by Azad et al. (2014) revealed similar recommendations noting limitations in the exploration of economic diversity specifically related to education and income. Additionally, it was noted that SES has both a direct and indirect impact on positive parenting. Roubinov and Boyce (2017) argue that existing research on SES and parenting uses a limited scope exploring parenting as a mediator for socioeconomic influences in child development. Shukla and Agarwal (2018) argue that genetic factors may be related to the onset of ODD in children as opposed to SES and parenting styles alone.

I recommend that future researchers conduct the study in more than one agency or other areas of the community to explore economic diversity. This will allow the researchers to get a clearer picture based on different levels of SES. Additionally, other variables (genetic factors, parental mental health, parental knowledge and expectations of childrearing and cultural norms) can be assessed as factors which may be moderated by SES on the level of EI in young children diagnosed with ODD.

Implications

Implications of the study refer to the potential impact of my research on future research. One of the potential impacts for positive social change in the study was to provide content to inform future interventions related to parenting styles, EI, and ODD to minimize symptoms overtime and eliminate the development of comorbidity. I sought to fill a gap in the literature by

providing information which addresses the moderating effect of SES on the relationship between parenting styles and the level of EI in young children diagnosed with ODD. However, the current research did not show a statistically significant impact of SES on the relationship between parenting styles and level of emotional intelligence in young children diagnosed with ODD.

Further research is recommended to solidify the moderating effect of SES on the relationship between parenting styles and level of EI in young children diagnosed with ODD. However, impactful strategies which may be beneficial include: access to behavioral health and mental health resources for families in low income neighborhoods and parent education/training. Although this present study did not show significant results, past and current research support the idea that lack of resources and access to resources as well as parenting style have some level of impact on child development (to include EI) (Anton et al., 2015; Argyrious et al., 2014; Azad et al., 2014; Batool & Bond, 2015; Baumrind, 1978; Calik-Var et al., 2015; Cindea, 2015; Cooker et al., 2015; Devenish et al., 2017; Granero et al. 2015; Masud et al., 2016; McLoyd, 1990; Roubinov & Boyce, 2017; September et al., 2016; Sheraz & Najam, 2015; Shukla & Agarwal, 2018; Tang et al., 2017; Troy et al., 2017). Focus in these areas with young children aged 4-8 years old, diagnosed with ODD, have the potential to decrease long term symptoms related to ODD and/or level of EI. Additionally, awareness of these impacts within communities can also support social change by educating the population to include individuals, families, and professionals.

Conclusion

Level of EI can be impacted in different ways (Calik-Var et al., 2015). Assessing these impacts and identifying both proactive and reactive interventions can increase the potential of

positive functioning in young children diagnosed with ODD. Results of the study were not statistically significant to state that SES moderates the relationship between parenting styles and level of EI in young children diagnosed with ODD. However, the research does not have to end with the noted variables. Exploring alternative impacts can potentially reduce the occurrence of long term or comorbid diagnosis later in adolescence or adulthood in persons diagnosed with ODD.

References

Alegre, B. (2012). Is there a relation between mothers' parenting styles and children's trait emotional intelligence? *Electronic Journal of Research in Educational Psychology, 10*, 5–34. Retrieved from http://www.investigacion-psicopedagogica.org/revista/new/ContadorArticulo.php?657

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, D.C.: Author.

Anton, M. T., Jones, D. J., & Youngstrom, E. A. (2015). Socioeconomic status, parenting, and externalizing problems in African American single-mother homes: A person-oriented approach. *Journal of Family Psychology, 29*(3), 405-415. http://dx.doi.org/10.1037/fam0000086

Antunez, Z., de la Osa, N., Granero, R. & Ezpeleta, L. (2016). Parental psychopathology levels as a moderator of temperament and oppositional defiant disorder symptoms in preschoolers. *Journal of child and Family Studies, 25*, 3124-3135. doi:10.1007/s10826-016-0461-2

Argyriou, E., Bakoyannis, G., & Tantaros, S. (2016). Parenting styles and trait emotional intelligence in adolescence. *Scandinavian Journal of Psychology*, *57*(1), 42-49. doi:10.1111/sjop.12266

Azad, G., Blacher, J., & Marcoulides, G. (2014). Longitudinal models of socio-economic status: Impact on positive parenting behaviors. *International Journal of Behavioral Development, 38*(6), 509–517. doi:10.1177/0165025414532172

Babbie, Earl R. (2010) *The practice of social research*. (12th ed.) Belmont, CA: Wadsworth Cengage.

Bairwa, M., Rajput, M., & Sachdeva, S. (2013). Modified Kuppuswamy's Socioeconomic Scale: Social Researcher Should Include Updated Income Criteria, 2012. *Indian Journal of Community Medicine, 38(3)*, 185-186. doi:10.4103/0970-0218.116358

Batool, S. S., & Bond, R. (2015). Mediational role of parenting styles in emotional intelligence of parents and aggression among adolescents. *International Journal of Psychology*, *50*(3), 240-244. doi:10.1002/ijop.12111

Baumrind, D. (1966). Effects of authoritative parental control on child behavior, *Child Development, 37(4)*, 887-907. doi:10.2307/1126611

Baumrind, D. (1978). Parental disciplinary patterns and social competence in children. *Youth & Society*, *9*(3), 239-267. doi:10.1177/0044118X7800900302

Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence,11*(1), 56-95. doi:10.1177/0272431691111004

Bøe, T., Sivertsen, B., Heiervang, E., Goodman, R., Lundervold, A. J., & Hysing, M. (2014). Socioeconomic status and child mental health: The role of parental emotional well-being and parenting practices. *Journal of Abnormal Child Psychology*, *42*(5), 705-715. doi: 10.1007/s10802-013-9818-9

Boily, R., Kingston, S. E., & Montgomery, J. M. (2017). Trait and ability emotional intelligence in adolescents with and without autism spectrum disorder. *Canadian Journal of School Psychology, 32*(3-4), 282-298. doi:10.1177/0829573517717160

Booker, J. A., Ollendick, T. H., Dunsmore, J. C., and Greene, R. W. (2016). Perceived parent-child relations, conduct problems, and clinical improvement following the treatment of oppositional defiant disorder. *Journal of child and Family Studies, 25*(5), 1623–1633. doi:10.1007/s10826-015-0323-3.

Boyle, M. H., and Lipman, E. L. (2002). Do places matter? Socioeconomic disadvantage and behavioral problems of children in Canada. *Journal of Consulting and Clinical Psychol*ogy, 70, 378–389. doi: 10.1037/0022-006x.70.2.378

Brown, C. A., Granero, R., & Ezpeleta, L. (2017). The reciprocal influence of callous-unemotional traits, oppositional defiant disorder and parenting practices in preschoolers. *Child Psychiatry and Human Development, 48*, 298 –307. http://dx.doi.org/10.1007/s10578-016-0641-8

Bunte, T. L., Shoemaker, K., Hessen, D. J., van der Heijden, P. G. M., & Matthys, W. (2014). Stability and change of ODD, CD, and ADHD diagnosis in referred preschool children. *Journal of Abnormal Child Psychology, 42*, 1213-1224. doi:10.1007/s10802-014-9869-6

Çalik-Var, E., Kiliç, S., & Kumandas, H. (2015). Investigating opinions of mothers on different socioeconomic status in terms of perceived maternal styles. *Eurasian Journal of Educational Research*, *61*, 81-98. doi:10.14689/ejer.2015.61.5

Cavanagh, M., Quinn, D., Duncan, D., Graham, T., & Balbuena, L. (2017). Oppositional defiant disorder is better conceptualized as a disorder of emotional regulation. *Journal of Attention Disorders*, *21*(5), 381-389. doi:10.1177/1087054713520221

Chaudhuri, J. H., Easterbrooks, M. A., & Davis, C. R. (2009). The relation between emotional availability and parenting style: Cultural and economic factors in a diverse sample of

young mothers. *Parenting: Science and Practice*, *9*(3-4), 277-299. doi:10.1080/15295190902844613

Children's Hospital of Philadelphia. (2018). *Oppositional Defiant Disorder.* Retrieved from http://www.chop.edu/conditions-diseases/oppositional-defiant-disorder

Cindea, A. M. (2015). The relationship between mothers perceived parenting style and adolescent's emotional intelligence and self-esteem. *Journal Plus Education*, *13*(2), 86-91. Retrieved from https://www.uav.ro/jour/index.php/jpe/article/view/574

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New Jersey: Lawrence Erlbaum.

Cohen, J., Cohen, P., West, S. G., and Aiken, L. S. (2003). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* (3rd ed.). Mahwah, NJ: Erlbaum.

Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed method approaches* Thousand Oaks, CA: Sage Publications.

Cruz-Alaniz, Y., Martin, A.B, & Ballabriga, M. C. J. (2018). Mother's and father's executive functions, parenting styles, and oppositional defiant disorder symptoms: A relational model. *Universitas Psychologica, 17*(2), 1-10. Retrieved from https://doi.org/10.11144/Javeriana.upsy.17-2.

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, *113*(3), 487. doi:10.1037/0033-2909.113.3.487

Davis, E., Sawyer, M. G., Lo, S. K., Priest, N., and Wake, M. (2010). Socioeconomic risk factors for Mental Health Problems in 4-5-Year-Old Children: Australian population study. *Academic Pediatrics, 10*, 41–47. doi:10.1016/j.acap.2009.08.007

Devenish, B., Hooley, M. & Mellor, D. (2017). The pathways between socioeconomic status and adolescent outcomes: A systematic review. *American Journal of Community Psychology, 59*, 219-238. doi:10.1002/ajcp.12115

Dotterer, A. M., Iruka, I. U., & Pungello, E. (2012). Parenting, race, and socioeconomic status: Links to school readiness. *Family Relations*, *61*(4), 657-670. doi:10.1111/j.1741-3729.2012.00716.x

Dunsmore, J. C., Booker, J. A., & Ollendick, T. H. (2013). Parental emotion coaching and child emotion regulation as protective factors for children with oppositional defiant disorder. *Social Development, 22*(3), 444-466. doi:10.1111/j.1467-9507.2011.00652.x

Esnaola, I., Revuelta, L., & Ros, I., & Sarasa, M. (2017). The development of emotional intelligence in adolescence. *Anales de Psicologia,* 33(2), 327-333. Retrieved from http://dx.doi.org/10.6018/analesps.33.2.251831

Ezpeleta, L. & Penelo, E. (2015). Measurement invariance of oppositional defiant disorder dimensions in 3-year-old preschoolers. *European Journal of Psychological Assessment*, *31*, 45-53. doi:10.1027/1015-5759/a000205

Frankfort-Nachmias, C., Nachmias, D., & DeWaard, J. (2015). *Research methods in the social sciences* (8th ed.). New York, NY: Worth.

Garcia-Sancho, E., Salguero, J.M., and Fernandez-Berrocal, P. (2014). Relationship between emotional intelligence and aggression: A systematic review. *Aggression and Violent Behavior*, *19*, 584-589. Retrieved from https://doi.org/10.1016/j.avb.2014.07.007

Granero, R., Louwaars, L., & Ezpeleta, L. (2015). Socioeconomic status and oppositional defiant disorder in preschoolers: Parenting practices and executive functioning as mediating variables. *Frontiers in Psychology*, *6*, 1–12. http://doi.org/10.3389/fpsyg.2015.01412

Kajbafnezhad, H. (2016) Construction and Validation of Parental rating Scale from Children's Emotional Intelligence. *I-Manager's Journal on Educational Psychology*, 9(4), 16-20. Retrieved from https://files.eric.ed.gov/fulltext/EJ1131804.pdf

Kalff, A., Kroes, M., Vles, J., Hendriksen, J., Feron, F., Steyaert, J., et al. (2001). Neighbourhood level and individual level SES effects on child problem behaviour: a multilevel analysis. *J. Epidemiol. Community Health,* 55, 246–250. doi: 10.1136/jech.55.4.246

Leadbeater, B.J. & Ames, M.E. J. (2017). The longitudinal effects of oppositional defiant disorder symptoms on academic and occupational functioning in the transition to young adulthood. *Journal of Abnormal Child Psychology*, *45*, 749-763. https://doi.org/10.1007/s10802-016-0190-4

Locke, R. L. & Lang, N. J. (2016). Emotional knowledge and attentional differences in preschoolers showing context-inappropriate anger. *Perceptual and Motor Skills*, *123*(1), 46-63. doi:10.1177/0031512516658473

Martin, M. J., Sturge-Apple, M. L., Davies, P. T., & Romero, C. V. (2017). *Developmental Psychology, 53*(7), 1344-1355. http://dx.doi.org/10.1037/dev0000334

Masud, H., Ahmad, M. S., Jan, F. A., & Jamil, A. (2016). Relationship between parenting styles and academic performance of adolescents: mediating role of self-efficacy. *Asia Pacific Education Review, 17*, 121-131. doi:10.1007/s12564-015-9413-6

McLoyd, V. C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child development*, *61*(2), 311-346. doi: 10.1111/j.1467-8624.1990.tb02781.x

Merikangas, K.R., He, J.P., Burstein, M., Swanson, S.A., Avenevoli S, Cui L., Benjet, C., Georgiades, K., & Swendsen J. (2010). Lifetime prevalence of mental disorders in U.S. adolescents: Results from the National Comorbidity Survey Replication-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, *49*(10), 980–989. doi:10.1016/j.jaac.2010.05.017

Mesman, J., van IJzendoorn, M. H., & Bakermans-Kranenburg, M. J. (2012). Unequal in opportunity, equal in process: Parental sensitivity promotes positive child development in ethnic minority families. *Child Development Perspectives*, *6*(3), 239-250. doi:10.1111/j.1750-8606.2011.00223.x

Moghaddam, M. F., Validad, A., Rakhshani, T., & Assareh, M. (2017). Child self-esteem and different parenting styles of mothers: a cross-sectional study. *Archives of Psychiatry and Psychotherapy*, *1*, 37-42. doi:10.12740/APP/68160

Moreno-Manso, J. M., Garcia-Baamonde, M. E., Guerrero-Barona, E., Godoy-Merino, M. J., Blazquez-Alonso, M., & Gonzalez-Rico, Pablo. (2016). Perceived emotional intelligence and social competence in neglected adolescents. Journal of Youth Studies, *19*(6), 821-835. http://dx.doi.org/10.1080/13676261.2015.1112883

O'Kearney, R. O., Salmon, K., Liwag, M., Fortune, C. & Dawel, A. (2017). Emotional abilities in children with oppositional defiant disorder (ODD): Impairments in perspective-taking and understanding mixed emtions are associated with high callous-unemotional traits. *Child Psychiatry and Human Development*, *48*, 346-357. doi:10.1007/s10578-016-0645-4

Petrides, K. V. & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, *15*, 425–448. doi: 10.1002/per.416

Petrides, K. V., Pita, R. & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, 98, 273–289. doi:10.1348/000712606X120618

Reiss, F. (2013). Socioeconomic inequalities and mental health problems in children and adolescents: a systematic review. *Social Science and Medicine, 90*, 24–31. doi: 10.1016/j.socscimed.2013.04.026

Robinson, C. C., Mandleco, B., Olsen, S. F., & Hart, C. H. (1995). Authoritative, authoritarian, and permissive parenting practices: Development of a new measure. *Psychological Reports*, *77*(3), 819-830. doi:10.2466/pr0.1995.77.3.819

Rodin, J., and Salovey, p. (1989). Health psychology. *Annual Review of Psychology*, 40, 533-579. doi:10.1146/annurev.ps.40.020189.002533

Roubinov, D. S. & Boyce, W. T. (2017). Parenting and SES: relative values or enduring principles? *Current Opinion in Psychology*, *15*, 162-167. Retrieved from http://dx.doi.org/10.1016/j.copsyc.2017.03.001

Sheraz., A. & Najam, N. (2015). Parenting styles, parenting practices and ADHD: Predicting oppositional defiant behavior in school and home setting. *VFAST Transactions on Education and Social Sciences*, *8*(1), 7-18. http://dx.doi.org/10.21015/vtess.v8i1.350

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, *9*(3), 185-211. doi:10.2190/DUGG-P24E-52WK-6CDG

September, S. J., Rich, E. G., & Roman, N. V. (2016). The role of parenting styles and socio-economic status in parents' knowledge of child development. *Early Child Development and Care, 186*(7), 1060-1078, doi:10.1080/03004430.2015.1076399

Sharma, R. (2017). Revised Kuppuswamy's Socioeconomic Status Scale: Explained and Updated. Indian Pediatrics, 54(10), 867-870. doi:https://doi.org/10.1007/s13312-017-1151-x

Sharma, R. & Saini, N.K. (2014). A Critical Appraisal of Kuppuswamy's Socioeconomic Status Scale in the Present Scenario. *Journal of Family Medicine and Primary Care, 3,* 3-4. doi: 10.4103/2249-4863.130248

Shukla, R. & Agarwal, V. (2018). Interactions between parental psychopathology, family instability and child disruptive behavior. *Journal of Indian Association of Child and Adolescent Mental Health, 14*(2), 105-116. Retrieved from https://www.researchgate.net/publication/324981588_Interactions_between_parental_psychopathology_family_instability_and_child_disruptive_behavior

Singh, T., Sharma, S., & Nagesh, S. (2017). Socioeconomic status scales updated for 2017. *International Journal of Research in Medical Sciences*, 5(7), 3264-3267. doi: http://dx.doi.org/10.18203/2320-6012.ijrms20173029

Smith, T. E., Lee, C. A., Martel, M. M., & Axelrad, M. E. (2017). ODD symptom network during preschool. *Journal of Abnormal Child Psychology*, *45*, 743-748.doi: 10.1007/s10802-016-0196-y

Soper, D. (2018). *A-Priori Sample Size Calculator for Multiple Regression.*

Srivastava, K. (2013). Emotional intelligence and organizational effectiveness. *Industrial Psychiatry Journal*, *22*(2), 97–99. http://doi.org/10.4103/0972-6748.132912

Tang, Y., Lin, X., Chi, P., Zhou, Q., & Hou, X. (2017). Multi-level family factors and affective and behavioral symptoms of oppositional defiant disorder in Chinese children. *Frontiers in Psychology, 8*(1123), 1-10.doi:10.3389/fpsyg.2017.01123

Troy, A. S., Ford, B. Q., McRae, K., Zarolia, P. & Mauss, I. B. (2017). *Emotion*, *17*(1), 141-154. Retrieved from http://dx.doi.org/10.1037/emo0000210

Wood, E., & Riggs, S. (2008). Predictors of child molestation, adult attachment, cognitive distortions, and empathy. *Journal of Interpersonal Violence*, *23*(2), 259-275. doi: 10.1177/0886260507309344

Appendix A: Kuppuswamy's Socioeconomic Scale

Education of the Head (Head of the household)

1 Profession or Honours

2 Graduate

3 Intermediate or diploma

4 High school certificate

5 Middle school certificate

6 Primary school certificate

7 Illiterate

Occupation of the Head

1 Legislators, Senior Officials & Managers

2 Professionals

3 Technicians and Associate Professionals

4 Clerks

5 Skilled Workers and Shop & Market Sales Workers

6 Skilled Agricultural & Fishery Workers

7 Craft & Related Trade Workers

8 Plant & Machine Operators and Assemblers

9 Elementary Occupation

10 Unemployed

Yearly Family Income (Based on annual household income in U.S. Dollars; U.S. Census Bureau, 2017)

1 ≥ 100,000

2 75,000-99,999

3 50,000-74,999

4 35,000-49,999

5 25,000-34,999

6 15,000-24,999

7 < 15,000

Appendix B: Parenting Style Dimensions Questionnaire-Short Form

For each item, rate how often you exhibit this behavior with your child.

Never (1), Once In Awhile (2), About Half of the Time (3), Very Often (4), Always (5)

_____ 1. I am responsive to my child's feelings and needs.
_____ 2. I use physical punishment as a way of disciplining my child.
_____ 3. I take my child's desires into account before asking him/her to do something.
_____ 4. When my child asks why he/she has to conform, I state: because I said so, or I am your parent and I want you to.
_____ 5. I explain to my child how I feel about the child's good and bad behavior.
_____ 6. I spank when my child is disobedient.
_____ 7. I encourage my child to talk about his/her troubles.
_____ 8. I find it difficult to discipline my child.
_____ 9. I encourage my child to freely express (himself)(herself) even when disagreeing with me.
_____ 10. I punish by taking privileges away from my child with little if any explanations.
_____ 11. I emphasize the reasons for rules.
_____ 12. I give comfort and understanding when my child is upset.
_____ 13. I yell or shout when my child misbehaves.
_____ 14. I give praise when my child is good.
_____ 15. I give into my child when the child causes a commotion about something.
_____ 16. I explode in anger towards my child.
_____ 17. I threaten my child with punishment more often than actually giving it.
_____ 18. I take into account my child's preferences in making plans for the family.
_____ 19. I grab my child when being disobedient.
_____ 20. I state punishments to my child and do not actually do them.
_____ 21. I show respect for my child's opinions by encouraging my child to express them.
_____ 22. I allow my child to give input into family rules.
_____ 23. I scold and criticize to make my child improve.
_____ 24. I spoil my child.
_____ 25. I give my child reasons why rules should be obeyed.
_____ 26. I use threats as punishment with little or no justification.
_____ 27. I have warm and intimate times together with my child.
_____ 28. I punish by putting my child off somewhere alone with little if any explanations.
_____ 29. I help my child to understand the impact of behavior by encouraging my child to talk about the consequences of his/her own actions.
_____ 30. I scold or criticize when my child's behavior doesn't meet my expectations.
_____ 31. I explain the consequences of the child's behavior.
_____ 32. I slap my child when the child misbehaves.

Appendix C: Parental Rating Scale from Children's Emotional Intelligence (4-8 years)

Please rate each one for your child: Always (3), Sometimes (2), Never (1)

__1- Is responsible.
__2-Understanding differences and similarities of others
__3-Ever have been told you've upset him.
__4-It is very difficult for him to see the distress of others.
__5-Sensitive and irritable.
__ 6-My child can entertain him/herself.
__7-Is a good friend for other children.
__8-Finds different ways to solve the problems.
__9-Tend to struggle
__10-Behaviors or thoughts that make us suffer.
__11-Is very sensitive to certain things such as (weight, height, special clothing).
__12-Easily makes friends in social situations.
__13-Shares easily his /her emotions with others.
__14-Have emotions and affect that hides them.
__15-Have irrational beliefs such as going to the park every day.
__16-Do something that takes negative label.
__17-Describes him/ herself as a negative person.
__18-Does your child say their needs to you and others?
__19-Expresses his / her needs properly.
__20- Keeps his/her rights.
__21-Tend to huff and unforgiveness.
__22-Show interest to participate in various activities
23-Understands the concept of private Property and privacy of others
__24-Keeps her/his personal things
__25-Uses favorite ways to take pleasure and amusing himself /herself.
__26-Participates in group games.
__27-Show a negative reaction when stayed at home.
__28-Either responds too quickly or first thinks and then react.
__29-Has a positive feeling about himself /herself.
__30-Is impatient.
__31-Is restraint.
__32-Easily is adopted to new condition.
__33-Express his anger and frustration without hurting himself, others and objects.
__34-Tends to cooperation and helping others.
__35-Can adapt himself to the conditions and is flexible.
__36-Looks for excuses.
__37-Defiants, obstinate and discuss with others.
__38-If a child was upset and cry gives him comfort.
__39-Destroys toys and others' things.
__40-Easily expresses his/her feelings to others.
__41-Enjoys from harassing and hurting others.
__42-Is spiteful and seeks revenge.
__43-Did have done something that is very difficult.
__44-Is peaceful and behaves positively with others.
__45-Attributes negative traits to him.